MINISTRY OF EDUCATION AND TECHNICAL EDUCATION

وزارة التربية والتعليم والتعليم الفنى

PRIMARY I

Mathematics

Teacher's Guide

2018/2019

Term 1

Foreword

This is a pivotal time in the history of the Ministry of Education and Technical Education (MOETE) in Egypt. We are embarking on the transformation of Egypt's K-12 education system starting in September 2018 with KG1, KG2 and Primary 1 continuing to be rolled out year after year until 2030. We are transforming the way in which students learn to prepare Egypt's youth to succeed in a future world that we cannot entirely imagine.

MOETE is very proud to present this new series of textbooks, Discover, with the accompanying digital learning materials that captures its vision of the transformation journey. This is the result of much consultation, much thought and a lot of work. We have drawn on the best expertise and experience from national and international organizations and education professionals to support us in translating our vision into an innovative national curriculum framework and exciting and inspiring print and digital learning materials.

The MOETE extends its deep appreciation to its own "Center for Curriculum and Instructional Materials Development" (CCIMD) and specifically, the CCIMD Director and her amazing team. MOETE is also very grateful to the minister's senior advisors for curriculum and early childhood education. Our deep appreciation goes to "Discovery Education," "Nahdet Masr," "Longman Egypt," UNICEF, UNESCO, World Bank Education Experts and UK Education Experts who, collectively, supported the development of Egypt's national curriculum framework. I also thank the Egyptian Faculty of Education professors who participated in reviewing the national curriculum framework. Finally, I thank each and every MOETE administrator in all MOETE sectors as well as the MOETE subject counselors who participated in the process.

This transformation of Egypt's education system would not have been possible without the significant support of Egypt's current president, His Excellency President Abdel Fattah el-Sisi. Overhauling the education system is part of the president's vision of 'rebuilding the Egyptian citizen' and it is closely coordinated with the ministries of higher education & scientific research, Culture, and Youth & Sports. Education 2.0 is only a part in a bigger national effort to propel Egypt to the ranks of developing countries and to ensure a great future to all of its citizens.

Words From
The Minister of Education
& Technical Education

It is my great pleasure to celebrate this extraordinary moment in the history of Egypt where we launch a new education system designed to prepare a new Egyptian citizen proud of his Egyptian, Arab and African roots - a new citizen who is innovative, a critical thinker, able to understand and accept differences, competent in knowledge and life skills, able to learn for life and able to compete globally.

Egypt chose to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks. The new education system is designed to help our children and grandchildren enjoy a better future and to propel Egypt to the ranks of advanced countries in the near future.

The fulfillment of the Egyptian dream of transformation is indeed a joint responsibility among all of us; governmental institutions, parents, civil society, private sector and media. Here, I would like to acknowledge the critical role of our beloved teachers who are the role models for our children and who are the cornerstone of the intended transformation.

I ask everyone of us to join hands towards this noble goal of transforming Egypt through education in order to restore Egyptian excellence, leadership and great civilization.

My warmest regards to our children who will begin this journey and my deepest respect and gratitude to our great teachers.

Dr. Tarek Galal Shawki
Minister of Education & Technical Education

Contents

How to Use This Guide

The Mathematics teaching guide is designed to support teachers in the preparation and implementation of learning activities by providing clear, step-by-step instructions embedded with teacher input, instructional strategies, and classroom management techniques.
In these learning activities, students explore, play, use manipulatives, move their bodies, communicate and collaborate with colleagues, ask and seek answers to questions, and practice new skills and concepts.

This instructional approach aims to help students accomplish the following goals:

- Build early numeracy
- Discover connections between and among math concepts
- Develop foundational computational skills
- Acquire and use math vocabulary
- Build awareness of measurement concepts and geometric shapes
- Enhance critical thinking, problem solving, collaboration, and communication
- Increase enjoyment of math

If instructors have not used such a guide before, some practical advice follows:

- Read each chapter carefully. Make notes and highlight important details.
- Take particular note of sections labeled **Term**, **Chapter**, or **Lesson Preparation for the Teacher**. These sections include steps the teacher will need to complete in order to implement the activities in the term, chapters, and lessons. Advance preparation will ease the instructor's workload and ensure successful learning experiences for students.
    - Gather the necessary materials and make any preparations before implementing the lessons.
    - Consider additional classroom management techniques necessary for your particular class and learning environment.

- Please note that a section of the Student Book has been designated as a Math Journal. The Math Journal is referenced throughout the teacher's guide. Students will draw, write, and complete math activities in their journals.
    - Math Journals are a wonderful resource for informally assessing student progress. They can help the instructor determine whether or not students are successfully learning and applying new skills and concepts. They can also provide critical information about the kinds of mistakes students are making. That information can be used to plan future instruction and differentiation.
- Take note of the following:
    - What are the pupils discovering or learning? (Content)
    - What are the students being asked to do? (Activity)
    - What is the teacher discovering about the pupils? (Assessment)
    - How could you adapt the lesson for the different abilities in your class? (Differentiation)

- During and after implementing each lesson, reflect and make notes on what was successful and possible suggestions for improvement.
- Planning with another teacher can often lead to greater implementation success as it provides an opportunity to discuss classroom expectations and management procedures and ensures that lessons are differentiated to better suit the needs of students. It is suggested that teachers meet with other instructors at least weekly to plan and reflect.

Background

In this Teacher Guide, Mathematics instruction is divided into Chapters. Each Chapter includes 10 days of instruction. The teaching of mathematics and the building of numeracy is very linear, with students learning new content in increments, and adding to their conceptual development and understanding slowly over time.

Mathematics lessons are organized into three components:

- Calendar and Movement (15-20 minutes)
  - During this daily routine, students develop number sense, early place value concepts, counting fluency and problem-solving skills. Students explore quantity and practice counting through patterns and movement.
- Learn (25-30 minutes)
  - During this daily routine, students learn and apply various math skills as the Teacher Guides them through review, instruction and practice.
- Share (5-10 minutes)
  - During this daily routine, students develop their ability to express mathematical ideas.

Some Instructional Considerations
Each section should be implemented every day. However, in some cases, students may need a few more minutes for one section and another section (or two) will have to be shortened for that day. The instructor should use best judgment and knowledge of students and their needs.

Story problems and numbers are provided as examples. The instructor can use the story and numbers provided or create stories of their own. If the numbers in a story problem or sample problem are changed, be sure to limit the quantities to those identified in the indicators and outcomes (for example, "within 10").

The instructor is encouraged to incorporate familiar counting songs, poems, rhymes, math stories/literature, and math games and activities that are not included in this Teacher Guide.

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Mathematics Scope and Sequence for Term 1

MATH	CHAPTERS 1-3	CHAPTERS 4-6
COUNTING AND CARDINALITY		
DAILY PRACTICE • Count objects to tell how many there are. • Count by ones up to 20. • Read and write numerals from 0 up to 20. • Understand the relationship between numbers and quantities up to 20. • Write numbers and represent quantities with a number up to 20. • Make equivalent (equal) sets. • Identify the number of objects in familiar groupings without counting. • Apply the understanding that each successive number name refers to a quantity that is one larger as they count. • Understand the concepts of greater than, less than, and equal to up to 20. • Compare two numbers between 1 and 20 presented as written numerals.	X	X
• Count by ones and tens up to 100. • Read and write numerals from 0 up to 100. • Understand the relationship between numbers and quantities up to 100. • Write numbers and represent quantities with a number up to 100. • Apply the Ten-Frame structure as another way to represent quantities in familiar grouping.		X
OPERATIONS AND ALGEBRAIC THINKING		
Classify objects by their attributes (color, size, and shape).	X	X
Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).		X
Add and subtract within 20 using strategies such as • counting on; • making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14) • decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); • using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); • creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).		X
Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.		X
Fluently add and subtract within 10.		X

MATH	CHAPTERS 1-3	CHAPTERS 4-6
Use addition and subtraction within 20 to solve word problems with unknowns in all positions.		X
NUMBERS AND OPERATIONS IN BASE TEN		
Represents the component of numbers up to 10.	X	
Compare numbers 0-20, using symbols >, =, and <.).	X	X
Arrange three or four numbers less than 20 using line numbers and cards.	X	
Count by ones and tens to 100, including one more and one less.		X
Mentally find 10 more or 10 less than a given number, without having to count.		X
MEASUREMENT AND DATA		
Tell and write time in hours using analog and digital clocks.		X
Organize data with up to three categories into bar graphs and picture graphs.	X	X
Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	X	X

P 1

Mathematics Pacing Guide for Term 1

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	1	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 3 objects • Compare 3 objects by size, shape, and color
	2	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 3 objects • Compare 3 objects by size, shape, and color
	3	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 4 objects • Compare 4 objects by size, shape, and color • Participate in data collection
	4	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 4 objects • Compare 4 objects by size, shape, and color • Answer questions about data
	5	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 5 objects • Compare 5 objects by size, shape, and color
	6	Students will: • Identify the month, day, and date • Count how many days they have been in school • Answer questions about data • Count up to 5 using a number line • Compare quantities
	7	Students will: • Identify the month, day, and date • Count how many days they have been in school • Answer questions about data • Write numbers from 0-3 • Show quantities up to 3 in pictures
	8	Students will: • Identify the month, day, and date • Count how many days they have been in school • Write numbers from 0-3 • Arrange numbers 0-3 on a number line

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	9	Students will: • Identify the month, day, and date • Count how many days they have been in school • Write numbers 4 and 5 • Arrange numbers 0-5 on a number line
	10	Students will: • Identify the month, day, and date • Count how many days they have been in school • Collaborate to create an artistic representation of 1, 2, 3, 4, and 5
2	11	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 6 • Write the number 6 • Represent quantities using pictures • Answer questions about data
	12	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 7 • Write the number 7 • Represent quantities using pictures • Answer questions about data
	13	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 8 • Write the number 8 • Represent the quantity 8 using pictures • Answer questions about data
	14	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 9 • Write the number 9 • Represent the quantity 9 using pictures • Answer questions about data
	15	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 10 • Write the number 10 • Represent the quantity 10 using pictures • Answer questions about data
	16	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count to 10 • Write the number 10 • Represent the quantity 10 using pictures • Answer questions about data
	17	Students will: • Identify the month, day, and date • Count how many days they have been in school

CHAPTER	DAY	INSTRUCTIONAL FOCUS
2	17	• Count to 10 • Write numbers 0-10 • Represent quantities 0-10 using pictures • Answer questions about data
	18	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count, read, and write up to 10 • Identify numbers that are 1 less and 1 more than a given number • Represent quantities from 1 to 10 using pictures
3	19	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count, read, and write 11, 12, and 13 • Use the terms greater than, less than, and equal to
	20	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count, read and write 11, 12, and 13 • Use the terms greater than, less than, and equal to
	21	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count, read, and write 14 and 15 • Use the terms greater than, less than, and equal to
	22	Students will: • Identify the month, day, and date • Count how many days they have been in school • Count, read and write 14 and 15 • Use the terms greater than, less than, and equal to
	23	Students will: • Identify the month, day, and date • Count (with the teacher) how many days they have been in school • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using the symbols >, <, and =
	24	Students will: • Identify the month, day, and date • Count (with the teacher) how many days they have been in school • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using the symbols >, <, and =
4	25	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Count, read, and write 16 and 17
	26	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Count, read, and write 16 and 17 • Use objects to count numbers and find 10 more

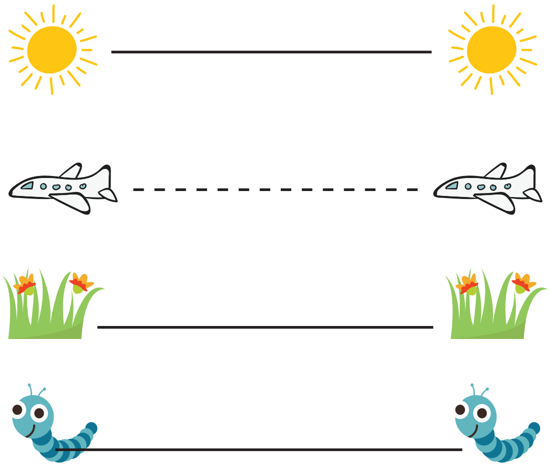
CHAPTER	DAY	INSTRUCTIONAL FOCUS
4	27	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Organize data into a picture graph
	28	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Count, read, and write 18 • Answer questions about data in a class picture graph
	29	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Count, read, and write 19 and 20 • Create visual representations of 19 and 20
	30	Students will: • Identify the month, day, and date • Identify the days of the week that are today, tomorrow, and yesterday • Count how many days they have been in school • Count up to 20 • Answer questions about data in a class bar graph
5	31	Students will: • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 22 • Write numerals 21 and 22 • Add within 10 using pictures and objects
	32	Students will: • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 24 • Write numerals 23 and 24 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
	33	Students will: • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 25 • Write the numeral 25 • Add within 10 using pictures and objects
	34	Students will: • Participate in Calendar Math activities • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 27 • Write the numerals 26 and 27 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
	35	Students will: • Participate in Calendar Math activities

CHAPTER	DAY	INSTRUCTIONAL FOCUS
5	35	• Classify objects by shape • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 29 • Write the numerals 28 and 29 • Add within 10 using pictures and objects
	36	Students will: • Participate in Calendar Math activities • Classify objects by shape and color • Count by ones and tens to 30 • Apply the ten-frame structure as a way to represent quantities • Write the numeral 30
	37	Students will: • Participate in Calendar Math activities • Count by ones and tens to 30 • Read and write numerals from 0-30 • Apply the ten-frame structure as a way to represent quantities • Add within 10 using pictures and objects
	38	Students will: • Participate in Calendar Math activities • Classify objects by their shape and size • Count by ones and tens to 30 • Read and write numerals from 0-30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
	39	Students will: • Participate in Calendar Math activities • Count by ones and tens to 30 • Represent quantities with a number up to 30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
	40	Students will: • Participate in Calendar Math activities • Classify objects by shape, size, and color • Count by ones and tens to 30 • Write numbers 1-30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
6	41	Students will: • Participate in Calendar Math activities • Count by ones and tens up to 32 • Read and write numerals up to 32 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings
	42	Students will: • Participate in Calendar Math activities • Count by ones and tens up to 34 • Read and write numerals up to 34 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings
	43	Students will: • Participate in Calendar Math activities • Count from 1 to 13

CHAPTER	DAY	INSTRUCTIONAL FOCUS
6	43	• Recognize 13 as 10 and 3 • Understand the relationship between numbers and quantities up to 10
	44	Students will: • Participate in Calendar Math activities • Count by ones and tens up to 37 • Read and write numerals up to 37 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Apply strategies to find the difference between two numbers
	45	Students will: • Participate in Calendar Math activities • Count by ones and tens up to 39 • Read and write numerals up to 39 • Demonstrate understanding of the relationship between numbers and quantities up to 39 • Apply the ten-frame structure as a way to represent quantities • Apply strategies to find the difference between two numbers
	46	Students will: • Participate in Calendar Math activities • Count by ones and tens up to 40 • Read and write numerals up to 40 • Apply the ten-frame structure as a way to represent quantities • Apply understanding of counting and quantity to play math games and activities
	47	Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Apply strategies to solve subtraction problems
	48	Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Apply strategies to solve addition and subtraction problems
	49	Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Solve addition problems to create fact families • Identify patterns in fact families
	50	Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Solve addition problems to create fact families • Identify patterns in fact families
7	51	Students will: • Participate in calendar math activities • Compare objects in a set to identify one that does not belong • Analyze number patterns in the hundreds chart • Count by ones to 100
	52	Students will: • Participate in calendar math activities

CHAPTER	DAY	INSTRUCTIONAL FOCUS
7	52	• Count by ones to 100 • Compare objects in a set to identify one that does not belong • Apply strategies to add and subtract within 10 • Tell time to the hour on an analog clock
	53	Students will: • Participate in calendar math activities • Count by ones to 100 • Apply strategies to add and subtract within 10 • Read and write time to the hour on an analog clock • Collect data to create a picture graph
	54	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 40-49 • Read and write time to the hour on analog and digital clocks • Answer questions about data in a picture graph
	55	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 50-59 • Read and write time to the hour on analog and digital clocks • Apply the ten-frame structure as a way to represent quantities • Solve subtraction problems to create fact families • Answer questions about data in a bar graph
	56	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 60-69 • Apply the ten-frame structure as a way to represent quantities • Solve subtraction problems to create fact families • Read and write time to the hour on analog and digital clocks
	57	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 70-79 • Solve addition problems within 20 • Describe strategies for solving challenging addition problems
	58	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 80-89 • Solve subtraction problems within 20 • Describe strategies for solving challenging subtraction problems • Apply understanding of time to create a schedule
	59	Students will: • Participate in calendar math activities • Count by ones and tens to 100 • Read and write numbers 90-99 • Apply addition and subtraction strategies to solve problems within 12
	60	Students will: • Participate in calendar math activities • Count by ones and tens up to 100 • Read and write numerals up to 100 • Apply understanding of counting and quantity to play math games and activities

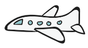
Sky Writing Procedure



Teacher will need dry erase or chalkboard with these lines:

The lines should always be referred to by their name, even if the icons are not on regular lined paper. Before writing students should identify where each line is located.

 is called the "Sky Line"

 is called the "Plane line"

 is the "Grass Line"

 is the "Worm Line"

Sky Writing posture: standing with dominant hand raised straight out (do not bend the elbow). Use two fingers and rotate at the shoulder when Sky Writing.

The teacher writes on the lines and says the steps out loud. Then, students trace the number in the air, saying the steps out loud with the teacher. Repeat each number.

Example: steps to say out loud for Sky Writing the number 1.

"Start at the Sky Line, go straight down to the grass line."

PRIMARY 1

Mathematics

Chapter 1

Lessons 1-10

Overview

Lessons 1-10

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :
- Count objects to tell how many there are
- Count by ones to 20
- Read and write numerals from 0 to 20
- Understand the relationship between numbers and quantities up to 20
- Write numbers and represent quantities up to 20
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.

OPERATIONS AND ALGEBRAIC THINKING:
- Classify objects by their attributes (color, size, and shape).

NUMBERS AND OPERATIONS:
- Organize data with up to three categories into bar or picture graphs
- Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

NUMBERS AND OPERATIONS IN BASE TEN:
- Arrange three or four numbers less than 20 using line numbers and cards.

CH 1 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
1	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Count 3 objects • Compare 3 objects by size, shape, and color
2	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Count 3 objects • Compare 3 objects by size, shape, and color.
3	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Count 4 objects • Compare 4 objects by size, shape, and color • Participate in data collection
4	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Count 4 objects • Compare 4 objects by size, shape, and color • Answer questions about data
5	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Count 5 objects • Compare 5 objects by size, shape, and color
6	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Answer questions about data • Count up to 5 using a number line • Compare quantities
7	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Answer questions about data • Write numbers from 0-3 • Show quantities up to 3 in pictures

LESSON	INSTRUCTIONAL FOCUS
8	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Write numbers from 0-3 • Arrange numbers 0-3 on a number line.
9	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Write numbers 4 and 5 • Arrange numbers 0-5 on a number line.
10	**Students will:** • Identify the month, day, and date • Count how many days they have been in school • Collaborate to create an artistic representation of 1, 2, 3, 4, and 5

Term 1 Preparation for the Teacher

- Create **Calling Sticks**: Write the name of each student on a wooden stick.

- Create a Calendar Math area in your classroom. The Calendar Math area should include the following:
  - Large calendar with current month listed on top
  - Number chart to 100
  - A place to write the date each day
  - A place to write the total number of school days so far
  - A five frame. A new five frame will be added every five days. (See Lesson Materials for example.)
  - Three "pockets" made from paper, paper bags, paper boxes, or paper/plastic cups, stapled or attached below the calendar. (See Lesson Materials for example.)
    - Label the first one: Ones
    - Label the second one: Tens
    - Label the third one: Hundreds
  - Counting sticks that can be bundled (Example: straws, wooden sticks, or chenille stems)
  - 10-12 rubber bands
  - If possible, include the following:
    - A place to write special holidays or birthdays
    - The names of all the months

- Create or prepare student math journals. Think about how you will use and store them.
  - This can be a special notebook or a few sheets of paper stapled or clipped together.
  - Students will use daily to record drawings, thoughts, ideas, vocabulary, and math work.
  - Decide whether you will collect the math journals each day. Where will you store them so that you can get to them quickly and easily?
  - Some days, you may wish to do a quick check of students' journals to determine who may need extra instruction or help. Other days, you may wish to do a more formal review of students' work.

- In Lesson 46, students will celebrate counting to 40 by playing games and doing activities in which they practice counting by 1s and 10s to 40. Preview the lesson and familiarize yourself with the games and activities to decide which ones you would like to do. Gather the materials you will need for each in advance. The materials you need are included in the game descriptions.

- In Lesson 60, students will celebrate counting to 100 by playing games and doing activities in which they practice counting by 1's and 10's to 100. Preview the lesson and familiarize yourself with the games and activities to decide which ones you would like to do. Gather the materials you will need for each in advance. The materials you need are included in the game descriptions.

Lesson 1 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count how many days they have been in school
- Count 3 objects
- Compare 3 objects by size, shape, and color

KEY VOCABULARY

- Calendar
- Month
- Day
- Five frame
- Compare
- Same
- Different
- Math journal

LESSON PREPARATION FOR THE TEACHER

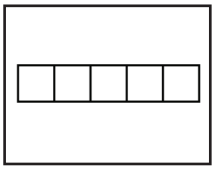
- Gather 3 small objects of different sizes and colors

MATERIALS

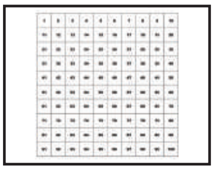
Calendar Math Area (See Theme Preparation for the Teacher for instructions.)



Five Frame



Number chart to 100



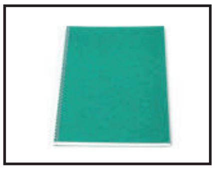
3 small objects of different sizes and colors for students to count



Ones, Tens, and Hundreds pockets, boxes, or cups



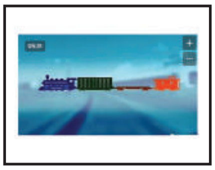
Math Journal



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be banded together



OPTIONAL Video Resources:
TITLE: Representing Numbers



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to calendar.

TEACHER SAY: **The calendar helps us keep track of days, weeks, months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.**

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **We are in the month of (current month) in the year _______. Now you say it.**

STUDENTS DO: Repeat the month and year.

3. TEACHER DO: Point to the days of the week one at a time and say each day's name. Have students repeat the names after each.

TEACHER SAY: **Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Repeat the names of the days of the week after the teacher.

4. TEACHER DO: Count the days of the week aloud.

TEACHER SAY: **How many days are there in a week?**

STUDENTS DO: Answer the question – 7.

5. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: **What are the numbers on the calendar?**

STUDENTS DO: Raise their hands to answer the question (if they know).

TEACHER SAY: **The numbers on the calendar tell us the date.**

6. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year).**

TEACHER DO: Ask students to repeat the date.

STUDENTS DO: Repeat the date.

7. TEACHER SAY: **We have been in school for 1 day.**

8. TEACHER DO: Take 1 straw (or stick or chenille stem) and place it in the Ones pocket as you count, "One." Tell students that tomorrow one of them will place the straw in the pocket. (Note: You may use any counting object you like, as long as it can be bundled and placed in the pockets you created.)

9. TEACHER DO: Circle 1 on the number chart. Say:

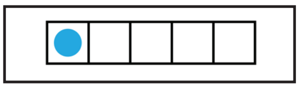
TEACHER SAY: **I am putting a circle around the number 1 on the number chart to show how many days we have been in school. Count 1 with me when I point to the circled number.**

STUDENTS DO: Count 1 when the teacher points.

10. TEACHER DO: Show students the five frame.

TEACHER SAY: **This is a five frame. It is called a five frame because it has five spaces on it. Watch as I count them.**

TEACHER DO: Draw one dot on the five frame.



TEACHER SAY: **We have been in school one day, so I drew one dot in the first square on the five frame.**

11. TEACHER DO: Ask students to look around the room and find one of something.

STUDENTS DO: Look around the room to find one of something.

TEACHER DO: Using **Calling Sticks**, select 4 students to share what they found.

Learn (25-30 mins)

Directions

1. TEACHER SAY: I was cleaning my house and found some special objects I did not want to throw away. (Note: This story is included as an example. If you prefer, use a story that will interest your students.)

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

2. TEACHER SAY: Can you help me count the objects? Repeat after me: 1, 2, 3.

STUDENTS DO: Count the objects after the teacher.

3. TEACHER DO: Using your fingers to point at each object, count again 1, 2, 3.



4. TEACHER SAY: How can we show 3 using our fingers?

TEACHER DO: Using your fingers, model how to count 1, 2, 3.

STUDENTS DO: Hold up 3 fingers as modeled by the teacher.

5. TEACHER DO: Place the objects in a straight line.

TEACHER SAY: How many objects are there?

TEACHER DO: Rearrange the objects.

TEACHER SAY: How many objects do I have now? Are there still 3? When I move them around, does it change how many objects I have? How do you know?

STUDENTS DO: Raise their hands to answer the teacher's questions. Share their thinking with their classmates.

6. TEACHER SAY: Compare the objects and talk about your thinking with a Shoulder Partner.

TEACHER DO: As students work, use questions such as the following to students compare the objects and to use appropriate vocabulary:

- How are these items alike?
- How are they different?
- Are they the same size?
- Which one is the largest?
- Which one is the smallest?
- Are they the same shape?
- Tell me about the different shapes.
- Are they the same color?
- Tell me about the different colors.

TEACHER DO: Use **Calling Sticks** to select students to talk about how they compared the objects.

STUDENTS DO: Share with the class how they compared the objects.

7. TEACHER DO: Using **Calling Sticks**, choose 3 students (a mix of boys and girls) to the come to the front of the room.

STUDENTS DO: Selected students go to the front of the room.

8. TEACHER DO: Tell the students who are seated to show on their fingers how many students are at the front of the room.

STUDENTS DO: Hold up 3 fingers.

9. TEACHER DO: Ask a student to come to the front of the room and demonstrate how to count their classmates.

STUDENTS DO: Selected student models how to count their classmates: 1, 2, 3. Student returns to seat.

10. TEACHER SAY: Raise the number of fingers that shows how many girls are in this group?

STUDENTS DO: Raise _____ fingers to show how many girls are in the group.

TEACHER SAY: You should be holding up ______ fingers.

11. TEACHER SAY: Raise the number of fingers that shows how many boys are in this group?

STUDENTS DO: Raise _____ fingers to show how many boys are in the group.

TEACHER SAY: You should be holding up ______ fingers.

11. TEACHER SAY: Do all the students look the same? What is the same? What is different?

TEACHER DO: Use **Calling Sticks** to choose students to answer.

STUDENTS DO: Describe how they think the 3 students are alike and different.

12. TEACHER DO: Hand out the math journals to students. Save one for yourself.

TEACHER SAY: You will use your math journals to write down or draw your thinking about math.

TEACHER DO: Hold up a math journal. Turn to the first page. Tell students to turn to the first page of their journals.

STUDENTS DO: Turn to the first page of their math journals.

13. TEACHER SAY: Look around our classroom to find three things you like and draw those three things on page 1 of your math journal. You have about 5 minutes.

STUDENTS DO: Look around the room and choose 3 things to draw. Draw 3 things in their math journals.

TEACHER DO: Walk around the room to help students who need assistance. Note which students may need extra instruction or practice counting to 3.

STUDENTS DO: Keep journals open to their drawings for the Share segment.

Share (5 mins)

Directions

1. TEACHER SAY: At the end of each lesson you will talk about what you learned, share your ideas, and ask questions. Look at the pictures you drew. How can you tell how many of something there are?

TEACHER DO: Use **Calling Sticks** to ask 3 students to share or talk about the objects they drew in their journals.

STUDENTS DO: Share their thinking about counting to tell how many of something there are.

2. TEACHER DO: Ask the students the questions below. Tell students how you would like them to respond (for example, calling out, shoulder partner, **Calling Sticks**, raised hands).

TEACHER SAY:

- **Were the objects the same? How can you tell?**
- **What makes the objects not the same? How can you tell?**
- **What words can we use to talk about how they are alike or different (Examples may include: bigger, larger, smaller, different colors, wider, taller, shorter, used for different things)**

Lesson 2 Overview

OUTCOMES

Students will:

- Identify the month, day, and date
- Count how many days they have been in school
- Count 3 objects
- Compare 3 objects by size, shape, and color

KEY VOCABULARY

- Calendar
- Month
- Day
- Five frame
- Compare
- Same
- Different
- Math journal

LESSON PREPARATION FOR THE TEACHER

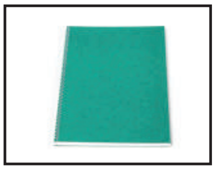
- Gather 3 small objects of different sizes and colors

MATERIALS

Calendar Math Area



Math Journal



3 small objects of different sizes and colors for students to count



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the calendar.

TEACHER SAY: **Remember yesterday I told you the calendar helps us to keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing math skills using a calendar.**

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **We are in the month of (current month) in the year ______. Now you say it.**

STUDENTS DO: Repeat the month and year.

3. TEACHER DO: Point to the days of the week one at a time and say each day's name.

TEACHER DO: The days of the week are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them with me.

STUDENTS DO: Say the days of the week.

4. TEACHER DO: Count the days of the week.

TEACHER SAY: How many days are there in a week? How many did I count?

STUDENTS DO: Answer the question – 7.

5. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: What are the numbers on the calendar? Do you remember?

STUDENTS DO: Raise their hands to answer the question (if they remember).

TEACHER SAY: The numbers on the calendar tell us the date and show us how many days are in the month. Not all months have the same number of days!

6. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). That is today's date. Now you say it: Today is…

STUDENTS DO: Say today's date.

TEACHER SAY: Let's count to see how many days we have been in school.

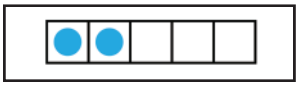
7. TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? There was 1 straw in the Ones pocket and we added 1 straw today, so now we have 2 straws. We have been in school 2 days.

8. TEACHER DO: Circle 2 on the number chart.

TEACHER SAY: I drew a circle around the number 2 on the number chart to show we have been in school for 2 days. Now I'm going to show 2 a different way.

9. TEACHER DO: Draw one dot on the five frame.



TEACHER SAY: I added one dot to our five frame to show how many days we have been in school. How many dots do we have on our five frame now? Count with me: 1, 2.

STUDENTS DO: Count the 2 dots.

9. TEACHER SAY: You have two ears! What else do you have two of?

TEACHER DO: Using **Calling Sticks**, select 3 students to share what they found.

STUDENTS DO: Raise their hands to answer the question. Possible answers may include eyes, hands, arms, legs, feet, knees, elbows, wrists, thumbs.

TEACHER SAY: Great job! You are so good at counting!

Learn (25-30 mins)

Directions

1. TEACHER SAY: I found more special objects to count and compare!

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: Can you help me count the objects?

STUDENTS DO: Count the objects with the teachers: 1, 2, 3.

2. TEACHER DO: Point at each object and repeat the count: 1, 2, 3. (If you prefer, have a student come up and demonstrate how to touch and count the items.)



3. TEACHER SAY: How can we show 3 using our fingers?

STUDENTS DO: Hold up 3 fingers as modeled by the teacher the previous day.

4. TEACHER DO: Place the objects in a straight line and ask how students many objects there are.

STUDENTS DO: Call out the answer.

TEACHER DO: Rearrange the objects.

TEACHER SAY: How many objects do I have now? Are there still 3? We talked about this yesterday: When I move the objects around, does it change how many objects I have? How do you know?

5. TEACHER SAY: Look at these 3 objects and compare them. How are they alike? How are they different? Talk about your thinking with a Shoulder Partner.

TEACHER DO: If necessary, use questions such as the following to help students compare the objects and to use appropriate vocabulary:

- How are these items alike?
- How are they different?
- Are they the same size?
- Which one is the largest?
- Which one is the smallest?
- Are they the same shape?
- Tell me about the different shapes.
- Are they the same color?
- Tell me about the different colors.

STUDENTS DO: Talk with their shoulder partners about how the objects are alike and different.

TEACHER DO: Use **Calling Sticks** to select students to talk about how they compared the three objects.

STUDENTS DO: Share their thinking with the class. Describe how the objects are alike and different, particularly by size, color, and shape.

10. TEACHER DO: Using **Calling Sticks**, choose 3 students (a mix of boys and girls) to the come to the front of the room.

TEACHER SAY: Show on your fingers how many students are at the front of the room.

STUDENTS DO: Hold up 3 fingers.

11. TEACHER DO: Use **Calling Sticks** to choose students to demonstrate counting 3 objects around the room. As students count, make sure they touch or point to each item and count aloud

so all of their classmates can hear. If you prefer, have students count aloud with the student who is counting objects around the room.

STUDENTS DO: Model counting 3 objects around the room. Touch or point to items they are counting.

TEACHER SAY: **You all did such a wonderful job counting today!**

12. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: **You will use your math journals to write down or draw your thinking about math.**

TEACHER DO: Hold up a math journal. Turn to the second page. Tell students to turn to page 2 in their journal.

STUDENTS DO: Turn to page 2 in their journal.

13. TEACHER SAY: **Look around the classroom (or in your imagination!) to find 3 things that are the same. Draw those 3 things on page 2 of your math journals. You have about 5 minutes.**

STUDENTS DO: Draw 3 things in the classroom (or from their imagination) that are the same.

TEACHER DO: Walk around the room to help students who need assistance. Take note of students who may need additional support counting to 3.

14. TEACHER DO: Using **Calling Sticks**, select 3 volunteers to share their drawings with the class and model counting aloud.

STUDENTS DO: Share their drawings with their classmates and model counting to 3. Keep journals open for Share segment.

Share (5 mins)

Directions

1. TEACHER SAY: **Remember yesterday, I told the class at the end of each lesson you will talk or share about what you learned and ask questions. Take a look at the objects you just drew. How can you tell how many of something there are?**

STUDENTS DO: Look at the objects they drew. Answer the teacher's question.

2. TEACHER SAY: **You were asked to draw 3 objects that are the same: What made the objects you drew the same? How can you tell?**

TEACHER DO: Using **Calling Sticks**, select 3 volunteers to talk about how the objects they drew are the same.

STUDENTS DO: Talk about how the objects they drew are the same.

Lesson 3 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count how many days they have been in school • Count 4 objects • Compare 4 objects by size, shape, and color • Participate in data collection	• Calendar • Month • Day • Five frame • Compare • Data • Math journal • Graph	• Gather objects of different sizes and colors for students to count (up to 4) and compare. • Create a simple graph showing the months of the year along the bottom axis as shown.

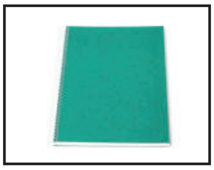
January	February	March	April	May	June	July	August	September	October	November	December

MATERIALS

Calendar Math Area



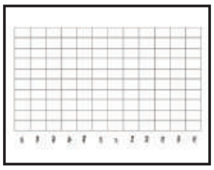
Math Journal



4 small objects of different sizes and colors for students to count



Birthday Graph with months of the year on bottom axis (See Lesson Preparation for the Teacher for instructions.)



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to calendar.

TEACHER SAY: We have been talking about how the calendar helps us keep track of days, weeks, and months, as well as special days such as your birthday or holidays. Every day we will be practicing our math skills using a calendar. And today, we'll be talking about our birthdays!

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year _______. Now you say it.

STUDENTS DO: Repeat the month and year.

3. TEACHER DO: Point to each month.

TEACHER SAY: I'm going to count the months aloud. If you know the numbers, count along with me.

STUDENTS DO: Observe as the teacher counts the months of the year. Count the months of the year (if they can).

4. TEACHER SAY: There are 12 months in a year: January, February, March, April, May, June, July, August, September, October, November, December. Now you say them with me.

STUDENTS DO: Say the months of the year with the teacher.

5. TEACHER SAY: Good! Today we are going to count and record how many boys and girls in our class have a birthday in each month of the year.

TEACHER DO: Display the birthday graph and point to it.

6. TEACHER SAY: This is where we will create our graph. A graph is a way to show *data* in a picture. *Data* is another word for information. Graphs are helpful when you want to compare pieces of information.

We are going to create a class graph that shows our birthday months. I am going to say the name of a month. If your birthday is in that month, you will raise your hand. I will count how many of you have raised your hands. Pay attention! I might ask you to count with me!

After I count the raised hands, I will write that many X's on the birthday graph. So for example, if 4 of you raise your hands for October, I would make 4 X's on the graph above October. When we are finished, we will be able to compare information about our birthday months. Ready?

Raise your hand if you were born in January..

STUDENTS DO: Raise hands when the teacher says their birthday month.

7. TEACHER DO: Place an X above the month according to the number of hands raised. Continue until you have completed all the months of the year and all students.

TEACHER SAY: See all the X's on the graph above each month? That is our data! We can count the number of X's above a month to tell how many students have birthdays that month.

TEACHER DO: Demonstrate: Count out loud the number of students in one or two months.

STUDENTS DO: Observe as the teacher counts the X's.

TEACHER SAY: We will talk about our graph again on another day, but for now let's finish our Calendar Math.

8. TEACHER DO: Point to the days of the week one at a time, and say each day's name.

Now you say the days of the week. I will help you.

STUDENTS DO: Say the days of the week with the teacher's help.

9. TEACHER SAY: How many days are there in a week? Let's check. If you know the numbers, count along with me.

TEACHER DO: Count the days of the week as you point.

STUDENTS DO: Observe as the teacher counts the days of the week. Count along, if possible

10. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: Who remembers what the numbers on the calendar mean?

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: If necessary, remind students that the numbers tell dates and show how many days are in each month.

11. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Repeat the date.

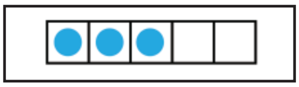
12. TEACHER SAY: Let's count to see how many days we have been in school.

TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: How many straws are in the Ones pocket now? There were 2 straws in the Ones pocket and we added 1 straw today, so now we have 3 straws. We have been in school 3 days!

13. TEACHER DO: Circle 3 on the number chart.

TEACHER SAY: I drew a circle around the number 3 on the number chart to show how many days we have been in school. Now I am going to show 3 a different way.



14. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I drew one dot in the square on the five frame to show how many days we have been in school. How many dots do we have on the five frame? Count with me.

STUDENTS DO: Count the dots with the teacher.

TEACHER SAY: There are 3 dots on the five frame. Great job!

Learn (25-30 mins)

Directions

1. TEACHER DO: Tell students you have more special objects you need help counting (or continue your own math story from Lesson 1). Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: Today I have one more object than I had yesterday! Does anyone know the number that comes after 3? Can you help me count my objects?

STUDENTS DO: Count along with the teachers, saying the numbers they know.

TEACHER SAY: It is 4! I have 4 objects! Count them with me: 1, 2, 3, 4! Today I have 4 objects.



2. TEACHER DO: Using your fingers, count 1, 2, 3, 4. Model for students how to show 4 fingers on your hand.

TEACHER SAY: Show me on your fingers how many special objects there are.

STUDENTS DO: Hold up 4 fingers as modeled by the teacher.

3. TEACHER DO: Place all 4 objects where students can see them.

TEACHER SAY: Count the objects again as I point to them.

STUDENTS DO: Count the objects again as the teacher points.

4. TEACHER DO: Move the objects so 3 are close together and 1 is a short distance away (but so the objects are still in a group. Consider drawing a circle around them to show they are all still together.)

TEACHER SAY: **How many objects do I have now?**

STUDENTS DO: Call out how many objects there are.

5. TEACHER DO: Count the objects aloud again.

TEACHER SAY: **Even though I have 3 objects over here and 1 object over here, I still have 4 objects. What if I do this?**

TEACHER DO: Group the items so that you have 2 groups of 2, slightly apart.

6. TEACHER SAY: **How many objects do I have now?**

STUDENTS DO: Call out how many objects there are.

TEACHER DO: Count the objects aloud again.

TEACHER SAY: **Even though I have 2 objects over here and 2 objects over here, I still have 4 objects. Does it change the number of objects I have if I rearrange them? How do you know? (If necessary, repeat the exercise again to reinforce the concept.)**

STUDENTS DO: Raise hands to answer the teacher's questions. Selected students answer the questions.

7. TEACHER DO: Use **Calling Sticks** to choose four different students (a mix of boys and girls) to come to the front of the room.

STUDENTS DO: Come to the front of the room when called.

8. TEACHER SAY: **Count the students standing up here as I put my hand above their heads. (Note: If you prefer, ask students to come to the front of the room to count their colleagues.)**

STUDENTS DO: Count each student when you put their hand above their heads.

9. TEACHER SAY: **I'm going to ask you some questions about the group of students up here. Hold up your fingers to show the number that answers the questions**

- **How many girls are in the group?**
- **How many boys are in the group?**
- **How many students in the group have long hair?**
- **How many students in the group have short hair?**

STUDENTS DO: Hold up fingers to answer the questions.

TEACHER DO: Take note of students who are having difficulty answering the questions.

10. TEACHER SAY: **Do all of the students in the group look the same? What makes the students not the same?**

TEACHER DO: Use **Calling Sticks** choose students to answer.

STUDENTS DO: Answer question when called on or ask for help.

11. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: **Remember that we will use our math journals to write down or draw our thinking about math.**

TEACHER DO: Hold up a math journal. Turn to the third page. Tell students to turn to page 3 in their journal.

STUDENTS DO: Turn to page 3 in their journals.

12. TEACHER SAY: Look around the classroom or at yourself and find 2 things that are the same and 2 things that are different. Draw a picture of those 4 things on page 3 of your math journal. You have about 5 minutes.

STUDENTS DO: Draw 2 things that are the same and 2 things that are different in their math journals. Keep their math journals open for the Share segment.

TEACHER DO: Walk around the room to help students who need assistance. Take note of students who may need additional instruction.

Share (5 mins)

Directions

1. TEACHER SAY: Remember, I told the class at the end of each lesson you will talk or share about what you learned and ask questions. How can we tell how many of something there are?

STUDENTS DO: Share their thinking with the class.

TEACHER SAY: That's right, we can count to tell how many of something there are. Look at the pictures you drew in your journal. I'm going to ask you some questions about those pictures. Share your answers with your Shoulder Partner. Do you have any questions?

STUDENTS DO: Ask any questions they have.

2. TEACHER SAY: Think about the 2 objects you drew that were the same.

- **Did you draw any that were the same shape? What were they?**
- **Did you draw any that were the same color? What were they?**
- **Did you draw any that were the same size? What were they?**

STUDENTS DO: Share their answers to the teacher's questions with their shoulder partners.

3. TEACHER DO: Use **Calling Sticks** to ask 4 students to talk about and count the objects they drew in their journals.

STUDENTS DO: Share their thinking with the class when called upon.

Lesson 4 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count how many days they have been in school
- Count 4 objects
- Compare 4 objects by size, shape, and color
- Answer questions about data

KEY VOCABULARY

- Calendar
- Month
- Day
- Compare
- Same
- Different
- Math journal
- Graph

LESSON PREPARATION FOR THE TEACHER

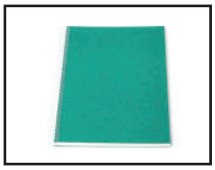
- Gather 4 small objects of different sizes and colors

MATERIALS

Calendar Math Area



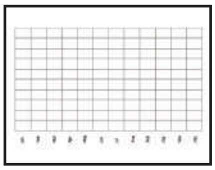
Math Journal



4 small objects of different sizes and colors for students to count



Birthday graph from previous lesson



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to calendar.

TEACHER SAY: Who can tell us what the calendar helps us keep track of?

TEACHER DO: Using **Calling Sticks** select students to answer the question.

TEACHER SAY: The calendar helps us to keep track of days, weeks, and months in a year, as well as special days such as your birthday or holidays.

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year ______. Now you say it.

STUDENTS DO: Repeat the month and year.

3. TEACHER DO: Point to the birthday graph.

TEACHER SAY: Yesterday we counted and recorded how many children in our class have a birthday in each month.

TEACHER DO: Point to each month and count them aloud.

TEACHER SAY: **There are 12 months in a year. January, February, March, April, May, June, July, August, September, October, November, December. Say them with me.**

STUDENTS DO: Repeat the months of the year.

4. TEACHER SAY: **Yesterday, I wrote X's on our class birthday graph to show how many of us have birthdays in each month. Each X represents one person in this class. Let's look at this month and count the X's to find out how many of us have a birthday this month!**

TEACHER DO: Model for students how to count the X's. Continue the process for the next two months on the graph, having students help you count aloud.

STUDENT DO: Help teacher count aloud. Listen along if they are not sure how to count.

10. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Have students repeat the names after each.

STUDENT DO: Say the days of the week after the teacher.

TEACHER DO: Count the days of the week aloud as you point to each day.

TEACHER SAY: **How many days are there in a week?**

STUDENTS DO: Answer the question – 7.

11. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: **What are the numbers on the calendar?**

STUDENTS DO: Raise hands to answer question. Explain that the numbers tell us the date and how many days are in the month.

TEACHER DO: If no students are able to answer, explain the answer to them.

12. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Ask students to repeat.**

STUDENTS DO: Repeat the date (with teacher help, if needed).

13. TEACHER SAY: **Let's count to see how many days we have been in school!**

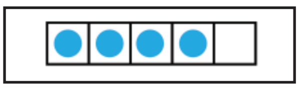
TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: **How many straws are in the Ones pocket now? There were 3 straws in the Ones pocket and we added 1 straw today, so now we have 4 straws. We have been in school 4 days!**

14. TEACHER DO: Circle 4 on the number chart.

TEACHER SAY: **I drew a circle around the number 4 on the number chart to show how many days we have been in school. Count the circled numbers with me.**

STUDENTS DO: Count the circled numbers with the teacher's help.



15. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: **I drew one dot in the square on the five frame to show that we have been in school 4 days. How many dots do we have on the five frame? Count with me.**

STUDENTS DO: Count to 4 with the teacher.

TEACHER SAY: **Great job! There are 4 dots on the five frame. Our five frame is almost filled!**

Learn (25-30 mins)

Directions

1. **TEACHER SAY: I have more special objects. (If you prefer, continue the story you started on Day 1, tailoring it to meet your students' needs.)**

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: Who can help me count my objects?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Using **Calling Sticks**, choose a student to come to the front of the room and model counting 4 objects. Repeat the process to give several students the opportchaptery to practice counting objects aloud.

STUDENTS DO: Count the objects with the teacher when called on.

2. **TEACHER SAY: Do you remember yesterday when I arranged the objects in different groups? Did the number of objects change when I rearranged them? How did you know? Why doesn't the number of objects change when I rearrange them?**

STUDENTS DO: Raise their hands to answer the questions.

TEACHER DO: Call on students to answer the questions. Correct any misconceptions or misunderstandings.

3. **TEACHER SAY: Who remembers how to show 4 using your fingers? Let's try it together.**

TEACHER DO: Hold up 4 fingers.

STUDENTS DO: Hold up 4 fingers.

4. **TEACHER SAY: We've been talking about the number 4. Can you think of any animals that have 4 legs? Talk to your Shoulder Partner about your ideas.**

STUDENTS DO: Talk to shoulder partners about animals that have 4 legs.

TEACHER DO: Use **Calling Sticks** to choose 4 students (a mix of boys and girls) to come to the front of the room and share their answers with the class. (Make sure there are only 4 students at the front of the room. Students will count them in the next step.) Correct their thinking if they name an animal that does not have 4 legs.

STUDENTS DO: Share their answers when called on.

5. **TEACHER SAY: How many students are standing at the front of the room? Who can come up and count them for me? The rest of you can count, too, but whisper your counting into your hands.**

TEACHER DO: Use **Calling Sticks** to choose a student to come to the front of the room and count the 4 students. That student should then sit, while the other 4 remain standing.

STUDENTS DO: Count the 4 students at the front of the room if called on. Whisper count into your hands.

6. **TEACHER DO:** Ask students to raise their fingers to answer questions (adding your own questions as appropriate for your students).

5. **TEACHER SAY:**
- **How many girls?**
- **How many boys?**

- **How many students have long hair?**
- **How many students have short hair?**
- **How many students are wearing red? Blue?**

STUDENTS DO: Raise their fingers to answer the teacher's questions.

7. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: **Remember that we will use our math journals to write down or draw our thinking about math.**

TEACHER DO: Hold up a math journal. Turn to the fourth page. Tell students to turn to page 4 in their journal.

STUDENTS DO: Turn to the fourth page in their math journals.

8. TEACHER SAY: **Draw an animal that has 4 legs. Make sure you show all 4 legs! You have about 5 minutes. When you are finished, show your drawing to your Shoulder Partner.**

STUDENTS DO: Draw and animal that has 4 legs. Show their drawings to their shoulder partners. Keep math journals open to their drawings for the Share segment.

TEACHER DO: Walk around the room to help students who need assistance. Take note of students who may need additional instruction.

Share (5 mins)

Directions

1. TEACHER SAY: **Remember, I told the class at the end of each lesson you will talk or share about what you learned and ask questions.**

TEACHER DO: Using **Calling Sticks**, ask 4 students to identify the animals they drew in their journals and count their legs aloud.

STUDENTS DO: Share their drawings, identify the animals they drew, and count their animals' legs.

TEACHER SAY: **How can we tell how many of something there are? What are some things you do that make it easier for you to count?**

Lesson 5 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count how many days they have been in school
- Count 5 objects
- Compare 5 objects by size, shape, and color

KEY VOCABULARY

- Calendar
- Month
- Day
- Five frame
- Compare
- Same
- Different
- Math journal
- Graph

LESSON PREPARATION FOR THE TEACHER

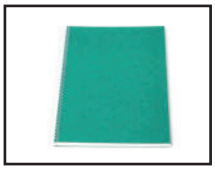
- Gather 5 small objects of different sizes and colors

MATERIALS

Calendar Math Area



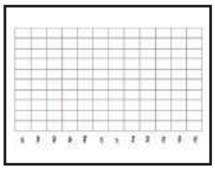
Math Journal



5 small objects of different sizes and colors for students to count



Birthday graph from previous lesson



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to calendar.

TEACHER SAY: Who can tell the class why we use calendars?

TEACHER DO: Using **Calling Sticks** select students to answer the question.

STUDENTS DO: Answer the question if called on. Ask the teacher for help, if needed.

TEACHER SAY: The calendar helps us to keep track of days, weeks, and months in a year, as well as special days such as your birthday or holidays.

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year ______. Now you say it.

STUDENTS DO: Repeat the month and year.

3. TEACHER SAY: Remember when we counted and recorded how many boys and girls had a birthday in each month? We created a class graph to show this information.

TEACHER DO: Point to the birthday graph. Then, point to each month and read the name aloud.

TEACHER SAY: **There are 12 months in a year. January, February, March, April, May, June, July, August, September, October, November, December. I'm going to read them again. You repeat each one after me.**

STUDENTS DO: Repeat after the teacher the months of the year.

4. TEACHER SAY: **I am going to ask you some questions about our birthday graph. Listen carefully so you can answer questions if I call on you.**

TEACHER DO: Using **Calling Sticks**, select students to answer questions about the birthday graph, such as the questions below. Ask additional questions based on the needs of your students.

TEACHER SAY:

- **How many students were born in January? February?**
- **Which month has the biggest number of birthdays? How can you tell?**
- **Which month has the smallest number of birthdays? How can you tell?**

STUDENTS DO: Answer the teacher's questions when called on.

5. TEACHER DO: Point to the days of the week and read them aloud in order.

TEACHER SAY: **The days of the week are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you repeat them after me.**

STUDENTS DO: Repeat after the teacher the days of the week.

6. TEACHER SAY: **How many days are there in a week? I'm going to count them. You can count along with me if you like.**

STUDENTS DO: Count along with the teacher or observe as the teacher counts.

7. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: **Why does the calendar have numbers?**

STUDENTS DO: Raise hands to answer the question, then answer when called on.

TEACHER SAY: **The numbers tells us the date and how many days are in each month.**

8. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Now you say it.**

STUDENTS DO: Repeat the date.

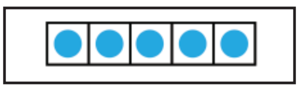
9. TEACHER SAY: **Let's count to see how many days have we been in school.**

TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: **How many straws are in the Ones pocket now? There were 4 straws in the Ones pocket and we added 1 straw today, so now we have 5 straws. We have been in school 5 days!**

10. TEACHER DO: Circle 5 on the number chart.

TEACHER SAY: **I drew a circle around the number 5 on the number chart to show how many days we have been in school. Count the circled numbers with me.**



STUDENTS DO: Count the circled numbers with the teacher's help.

11. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: **I drew one dot in the square on the five frame to show how many days we have been in school. How many dots do we have on the five frame now? Count them with me!**

STUDENTS DO: Count the dots with the teacher.

TEACHER DO: Ask questions to help students understand why the five frame is called a five frame, that the five frame is now full, and that we cannot add any more dots to the frame.

12. TEACHER SAY: **There are 5 dots on the five frame. Our five frame is filled! Do you know why it is called a five frame? What else do you notice about our five frame? Can we add any more dots to our five frame? Why not?**

STUDENTS DO: Raise hands to answer the teacher's questions.

TEACHER DO: Decide how you would like to call on students to answer the questions.

Learn (25-30 mins)

Directions

1. TEACHER DO: Tell students you have more special objects you need help counting. (If you prefer, continue the story you started on Day 1 or start a new story as needed for your students.) Hold the objects in the air one at a time and say the name of each item.

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: **Can you help me count my objects? 1, 2, 3, 4,… ! Wait! I have one more object than yesterday! Can you help me count all my objects?**

STUDENTS DO: Count the objects with the teacher.

TEACHER SAY: **1, 2, 3, 4, 5! I have 5 objects today! I have more objects today than I have had any other day!**

2. TEACHER DO: Using your fingers, count 1, 2, 3, 4, 5.

TEACHER SAY: **Show me on your fingers how to count to 5.**



TEACHER DO: Model for students how to show 5 fingers on your hand.

TEACHER SAY: **Now you show 5 fingers on your hand and count aloud to 5.**

STUDENTS DO: Show 5 fingers and count them aloud.

3. TEACHER DO: Place all 5 objects where students can see them and count them aloud again. Then, move the objects so 3 are close together and 2 are a short distance away (but so the objects are still in a group. If students think the objects are not in a group, draw a circle around them to show they are all still together.)

TEACHER SAY: **How many objects do I have now? Who can help me count them?**

STUDENTS DO: Raise hands to volunteer. Selected student helps the teacher count the items again.

TEACHER SAY: **Even though I have 3 objects over here and 2 objects over here, I still have 5 objects. What if I do this?**

4. TEACHER DO: Group the items so that you have one group of 4 and 1 object set slightly apart.

TEACHER SAY: **How many objects do I have now? Who can help me count.**

STUDENTS DO: Raise hands to volunteer. Selected student helps the teacher count the items again.

TEACHER SAY: Even though I have 4 objects over here and 1 object over here, I still have 5 objects. Does it change the number of objects I have if I rearrange them?

STUDENTS DO: Raise hands to volunteer or call out the answer.

TEACHER DO: If necessary, repeat the exercise again to reinforce the concept.

5. TEACHER SAY: Now, I want you to compare the objects and talk about your thinking with a Shoulder Partner. I will ask you some questions to help you think about how to compare the objects.

- **How are these items alike?**
- **How are they different?**
- **Are they the same size?**
- **Which one is the largest?**
- **Which one is the smallest?**
- **Are they the same shape?**
- **Tell me about the different shapes.**
- **Are they the same color?**
- **Tell me about the different colors.**

STUDENTS DO: Talk with their shoulder partner, comparing the objects to each other.

TEACHER DO: Use **Calling Sticks** to select students to talk about how they compared the five objects.

STUDENTS DO: Selected students share their thinking with the whole class.

6. TEACHER DO: Use **Calling Sticks** to choose five different students (a mix of boys and girls) to the front of the room.

STUDENTS DO: Come to the front of the room if called on.

TEACHER SAY: Show on your fingers how many students are standing at the front of the room.

STUDENTS DO: Show 5 fingers.

7. TEACHER SAY: I am going to put my hand over each student up here. You count aloud as I do that.

STUDENTS DO: Count aloud to 5 as the teacher holds a hand over the students' heads.

8. TEACHER SAY: I am going to ask you some questions about our friends up here. Hold up your fingers to show the answer.

- **How many girls?**
- **How many boys?**
- **How many students have long hair?**
- **How many students have short hair?**
- **How many students have on a ___ (choose a color) shirt?**

STUDENTS DO: Hold up fingers to answer the teacher's questions.

9. TEACHER SAY: Do all the students look the same? What makes the students not the same? How many students are in front of the class?

STUDENTS DO: Use **Calling Sticks** to choose students to answer

10. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: Remember that we will use our math journals to write down or draw our thinking about math.

TEACHER DO: Hold up a math journal. Tell students to turn to page 5 in their journal.

STUDENTS DO: Turn to page 5 in their math journals.

11. TEACHER SAY: How many fingers do we have on one hand? Since we have 5 fingers on one hand, we can use our hands to help us count to 5! Place one hand on page 5 of their journal and trace it. You have about 5 minutes.

TEACHER DO: Model what it means to trace a hand, if necessary. If students need assistance, have them work with a partner to trace each other's hands.

STUDENTS DO: Trace their hands and/or their partner's hand.

TEACHER DO: Walk around the room to help students who need assistance.

Share (5 mins)

Directions

1. TEACHER SAY: Remember, I told the class at the end of each lesson we will talk or share about what we learned and ask questions. What did you learn this week about calendars? What did you learn about counting? What did you learn about comparing objects?

TEACHER DO: Use **Calling Sticks** to ask 5 students to share or talk about what they have learned. If time allows, ask additional students to share their learning with their classmates.

STUDENTS DO: Discuss what they have learned with their classmates.

Lesson 6 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count how many days they have been in school
- Answer questions about data
- Count up to 5 using a number line
- Compare quantities

KEY VOCABULARY

- Month
- Day
- Number line
- More
- Less
- Math journal

LESSON PREPARATION FOR THE TEACHER

- Create or print a new fiveframe for the Calendar Math area

MATERIALS

Calendar Math Area



Math Journal

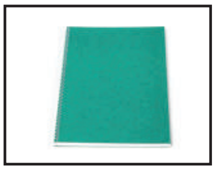
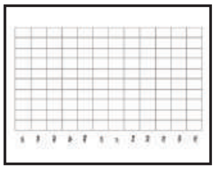


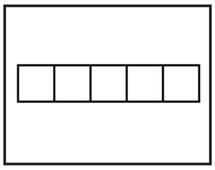
Chart paper, chalkboard/white-board, or overhead projector and markers



Birthday graph from previous lesson



Five frame



Calendar (15-20 mins)

Directions

1. TEACHER SAY: We study the calendar because it helps us to keep track of days, weeks, and months in a year, as well as special days such as your birthday or holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year ______. Now you say it.

STUDENTS DO: Repeat the month and year.

2. TEACHER DO: Point to each month as you say their names.

TEACHER SAY: There are 12 months in a year. January, February, March, April, May, June, July, August, September, October, November, December. Now you repeat them after me.

STUDENTS DO: Repeat the months of the year.

3. TEACHER SAY: We counted and recorded how many boys and girls had a birthday in each month. Who can tell us what our birthday graph shows? What do the X's mean?

STUDENTS DO: Raise hands to answer the questions.

TEACHER DO: Call on students with hands raised.

4. TEACHER SAY: How many students were born in June? How many students were born in July? Are there any months that have the same number of birthdays?

TEACHER DO: Using **Calling Sticks**, select students to answer questions about the data on the graph.

5. TEACHER DO: Point to the days of the week as you read them aloud.

TEACHER SAY: Now you say the days of the week with me.

STUDENTS DO: Say the days of the week with the teacher.

6. TEACHER SAY: How many days are there in a week? I'm going to count them. You can count along with me if you want to.

TEACHER DO: Count the days of the week.

STUDENTS DO: Count along with the teacher if they can.

7. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date.

8. TEACHER SAY: Let's count how many days have we been in school.

9. TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: How many straws are in the Ones pocket now? There were 5 straws in the Ones pocket and we added 1 straw today. (Count the straws.) Now we have 6 straws. We have been in school 6 days!

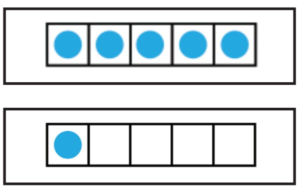
10. TEACHER DO: Circle 6 on the number chart.

TEACHER SAY: I drew a circle around the number 6 on the number chart to show how many days we have been in school. Count the circled days with me. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled days along with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

11. TEACHER SAY: We filled up our five frame yesterday, but we need to add another dot for today. What should we do?

STUDENTS DO: Call out recommendations. Students should say we have to add a new five frame.



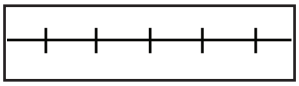
12. TEACHER SAY: Right! We need to add a new five frame. Here is a new one. I am drawing one dot in the square on the new five frame to show how many days we have been in school. How many dots do we have on the five frames now? Count with me.

STUDENTS DO: Count the dots along with the teacher.

TEACHER SAY: Great job! We have been in school for 6 days!

Learn (25-30 mins)

Directions



1. TEACHER DO: Draw a number line so all students can see it. Draw 5 evenly-spaced marks on the number line. Ask:

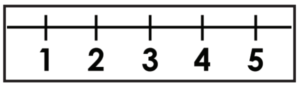
TEACHER SAY: What numbers have we been learning about and counting to?

STUDENTS DO: Respond 1, 2, 3, 4, 5.

TEACHER SAY: This is called a number line.

2. TEACHER SAY: I'm going to write the numbers on the number line. Which number do you think should go first? Which number should go next? Next?

STUDENTS DO: Raise hands to respond to the teacher's questions.



TEACHER DO: Write the numbers on the number line.

3. TEACHER SAY: We can use number lines to help us count. For example, I can count to 2.

TEACHER DO: Model counting to 2 on the number line.

TEACHER SAY: What happens if I go to the next number – 3? Is that number more than 2 or less than 2? Three is one more than 2.

STUDENTS DO: Provide answers if they are ready. Otherwise, observe the teacher.

TEACHER DO: Model counting from 2 to 3 on the number line.

TEACHER SAY: What if I start at 2 again and go back one spot to the number 1? Is that number more than 2 or less than 2? One is one less than 2.

STUDENTS DO: Provide answers if they are ready. Otherwise, observe the teacher.

TEACHER DO: Model counting from 2 to 1 on the number line. Repeat the process, starting at 3 and moving to 5, then starting at 3 and moving to 1.

TEACHER SAY: Now I'm going to call on some of you to practice moving on the number line.

TEACHER DO: Use **Calling Sticks** to have students come to the front of the classroom to practice moving from one spot to another on the number line. Select the numbers you would like students to work on. Ask questions about which number is more and which number is less to help them understand that as they move to the right on the number line, the quantity goes up. If they move to the left on the number line, the quantity goes down.

STUDENTS DO: Selected students count on the number line.

5. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: Today we will draw pictures in our math journals to show what we know about numbers.

TEACHER DO: Hold up a math journal. Tell students to turn to page 6 in their journal.

6. TEACHER SAY: What numbers have we been learning about?

STUDENTS DO: Raise hands to answer the question.

TEACHER SAY: Yes, we have learned about 1, 2, 3, 4, and 5. We have practiced counting from 1 to 5 and today we looked at 1, 2, 3, 4, and 5 on a number line.

7. TEACHER SAY: **On page 6 of your journal, draw 1 small object. You can draw 1 dot, 1 heart, 1 smiley face, 1 flower, or another picture you like. Draw a circle around it. It doesn't have to be a perfect circle! You are going to draw more on this page, so don't take up the whole page.**

STUDENTS DO: Draw 1 object in their journals. Draw a circle around it.

TEACHER DO: Direct students to draw 2 objects, 3 objects, 4 objects, and 5 objects. Each time students finish, have them draw a circle around the set to keep them separate from the other objects on the page.

STUDENTS DO: Draw 2, 3, 4, and 5 objects in their journals. Draw a circle around each group as they finish drawing it. Keep their math journals open for the Share segment.

TEACHER DO: Walk around the room to monitor students' work and offer help as needed. Take note of students who may require additional instruction.

Share (5 mins)

Directions

1. TEACHER SAY: **How can we tell how many of something there are?**

STUDENTS DO: Respond: We can count them!

TEACHER SAY: **Who would like to show me how they showed 1? Raise your hands and I will call on some of you.**

STUDENTS DO: Raise their hands to be called on. Share their drawings of 1 object.

TEACHER DO: Repeat for 2, 3, 4, and 5.

STUDENTS DO: Raise their hands to be called on. Share their drawings of 2, 3, 4, and 5 objects.

Lesson 7 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Identify the month, day, and date • Count how many days they have been in school • Answer questions about data • Write numbers from 0-3 • Show quantities up to 3 in pictures	• Month • Day • Zero • Math journal

MATERIALS

Calendar Math Area



Math Journal

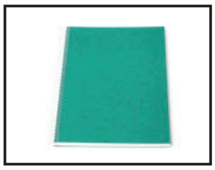
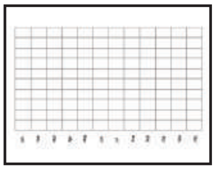


Chart paper, chalkboard/white-board, or overhead projector and markers



Birthday graph from previous lesson



Calendar (15-20 mins)

Directions

1. **TEACHER DO:** Point to the calendar.

TEACHER SAY: Who can tell me why we use the calendar? How does it help us? Do any of you have a calendar in your home? How does your family use it?

TEACHER DO: Using **Calling Sticks**, select students to answer the questions.

STUDENTS DO: Talk about how the calendar is helpful and how their family uses it.

2. **TEACHER DO:** Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year _______. Now you say it.

STUDENTS DO: Repeat the month and year.

3. **TEACHER SAY: Remember that we counted and recorded how many boys and girls had a birthday in each month. I wrote X's to represent how many of you have birthdays in each month.**

TEACHER DO: Point to each month on the birthday graph.

TEACHER SAY: There are 12 months in a year. January, February, March, April, May, June, July, August, September, October, November, December. Now you say them with me.

STUDENTS DO: Say the months of the year.

3. TEACHER DO: Using **Calling Sticks**, select students to answer questions about the birthday graph.

TEACHER SAY: How many students were born in March? How many students were born in April? What month(s) have 1 student birthday? 2 birthdays? 3 birthdays? 4 birthdays? 5 birthdays?

STUDENTS DO: Raise their hands to answer the questions.

4. TEACHER DO: Point to the days of the week.

TEACHER SAY: There are 7 days in a week: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them with me.

STUDENTS DO: Say the days of the week with the teacher.

5. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say it.

STUDENTS DO: Say the date.

6. TEACHER SAY: Let's count to see how many days have we been in school.

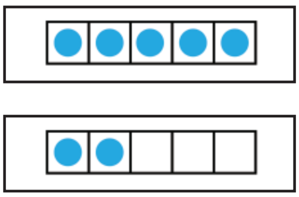
TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: How many straws are in the Ones pocket now? There were 6 straws in the Ones pocket and we added 1 straw today. (Count the straws.) Now we have 7 straws. We have been in school 7 days!

7. TEACHER DO: Circle 7 on the number chart.

TEACHER SAY: I drew a circle around the number 7 on the number chart to show how many days we have been in school. Let's count the circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



8. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: Remember we had to add a new five frame yesterday. I am drawing one dot for today in the square on the new five frame. How many dots do we have on the five frames now? Count with me. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: There are 7 dots on the five frames and we have been in school 7 days.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: Today we are going to talk about a new number. It may not seem very important at first, but it's very important! But first, I have some questions for you:

- **How many elephants are in the classroom right now?**
- **How many of you took a helicopter to school today?**
- **How many of you are taller than the pyramids?**

STUDENTS DO: Respond if called on by the teacher.

TEACHER SAY: How can we answer these questions? What number should we use? A very important number – zero!

2. TEACHER DO: Write the number 0 on the board.

TEACHER SAY: The zero looks like a tall circle. What does it mean to have zero?

TEACHER DO: Using **Calling Sticks**, select student to answer the question.

STUDENTS DO: Respond to the question if called on.

TEACHER SAY: To have zero of something means to have nothing of it.

3. TEACHER SAY: Today we are going to practice writing the numbers 0, 1, 2, and 3. It is okay if they are not perfect. We are just learning and we have to start somewhere! So, today is just about practicing. Does anyone have any questions?

STUDENTS DO: Ask questions, if they have any.

TEACHER SAY: We will start with 0. First we will write it in the air together. Stand up, hold your arm up, and use your finger as your pencil. Look at the zero I wrote on the board. Let's write it in the air.

STUDENTS DO: Write the number 0 in the air three times.

4. TEACHER SAY: Find the next blank page in your math journal. On that page, practice writing the number 0 three times.

STUDENTS DO: Write the number 0 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

5. TEACHER SAY: Can you draw a picture to match the number?

STUDENTS DO: Raise hands to respond to the question.

TEACHER SAY: Good thinking! We can't draw zero of anything because there would be nothing there!

6. TEACHER DO: Write the number 1 on the board.

TEACHER SAY: Look at the 1 I wrote on the board. Let's write it in the air together.

STUDENTS DO: Write the number 1 in the air three times.

7. TEACHER SAY: In your math journal, practice writing the number 1 three times.

STUDENTS DO: Write the number 1 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

8. TEACHER SAY: Can you draw a picture to show 1 of something?

STUDENTS DO: Raise hands to respond to the question.

TEACHER SAY: Yes, we can draw 1 of something. Do that now. Draw 1 dot to show 1.

STUDENTS DO: Draw 1 dot in their journals.

9. TEACHER DO: Write the number 2 on the board.

TEACHER SAY: Look at the 2 I wrote on the board. Let's write it in the air together.

STUDENTS DO: Write the number 2 in the air three times.

10. TEACHER SAY: In your math journal, practice writing the number 2 three times.

STUDENTS DO: Write the number 2 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

11. TEACHER SAY: Draw 2 dots in your math journal to show 2.

STUDENTS DO: Draw 2 dots in their journals.

12. TEACHER DO: Write the number 3 on the board.

TEACHER SAY: Look at the 3 I wrote on the board. Let's write it in the air together.

STUDENTS DO: Write the number 3 in the air three times.

13. TEACHER SAY: In your math journal, practice writing the number 3 three times.

STUDENTS DO: Write the number 3 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

14. TEACHER SAY: Now, draw 3 dots in your math journals to show 3.

STUDENTS DO: Draw 3 dots in their journals. Keep their math journals open for the Share segment.

Share (5 mins)

Directions

1. TEACHER SAY: Raise your hand if you would like to come to the front of the room and shareyour number writing and drawing with your colleagues.

STUDENTS DO: Raise their hands to volunteer.

TEACHER DO: Select 5 students to come to the front of the room to show their journals to their colleagues.

STUDENTS DO: Selected students hold journals open so everyone can see.

Lesson 8 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Identify the month, day, and date • Count how many days they have been in school • Write numbers from 0-3 • Arrange numbers 0-3 on a number line	• Month • Day • Zero • Number line • Math journal

MATERIALS

Calendar Math Area



Math Journal

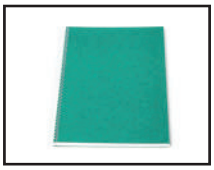
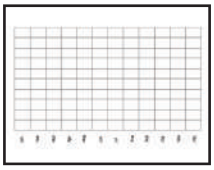


Chart paper, chalkboard/white-board, or overhead projector and markers



Birthday graph from previous lesson



OPTIONAL: Video Resources

TITLE:
Concept of Zero

https://tinyurl.com/ycrl7tjx

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Who can tell me what month and year it is?

STUDENTS DO: Raise hands to volunteer. Selected student tells the class what month and year it is.

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: Yes, it is (current month) in the year ______. Now everyone say it together.

STUDENTS DO: Say the month and year.

2. TEACHER SAY: There are 12 months in a year. They are January, February, March, April, May, June, July, August, September, October, November, December. Now you say them with me.

STUDENTS DO: Say the names of the months of the year with the teacher.

3. TEACHER DO: Point to the days of the week.

TEACHER SAY: There are 7 days in a week. They are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

4. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say it.

STUDENTS DO: Say the date.

5. TEACHER SAY: Let's count how many days we have been in school.

TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

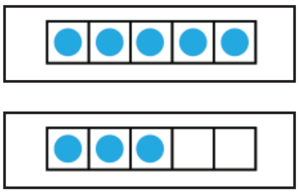
TEACHER SAY: How many straws are in the Ones pocket now? There were 7 straws in the Ones pocket and we added 1 straw today. (Count the straws.) Now we have 8 straws. We have been in school 8 days!

6. TEACHER DO: Circle 8 on the number chart.

TEACHER SAY: I drew a circle around the number 8 on the number chart to show how many days we have been in school. Let's count the circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

7. TEACHER DO: Draw one dot on the new five frame.



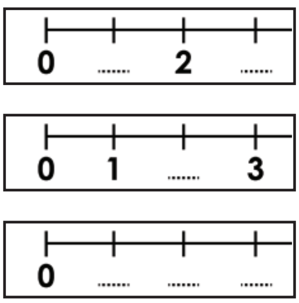
TEACHER SAY: I am drawing one dot for today in the square on the second five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: There are 8 dots on our five frames and we have been in school for 8 days!

Learn (25-30 mins)

Directions



1. TEACHER DO: Draw the number line examples below on the board or somewhere all students can see.

2. TEACHER SAY: There are numbers missing on the number lines I drew. A number line is a line of numbers that go in order, but I can't remember what numbers go in the blanks. Can you help me fill in the missing numbers on the number line?
What do you think we can do to figure out the missing numbers on the first number line?

STUDENTS DO: Raise hands to share ideas and strategies.

TEACHER DO: Call on students to try their strategies on the first number line. Have them do "think alouds" so the rest of the class can hear what they are thinking and why they are doing what they're doing.

STUDENTS DO: Try their strategies for filling in the missing numbers on the first number line. Talk about what they are doing as they are doing it so their classmates understand.

3. TEACHER DO: Repeat the procedure for the next two number lines. Make sure students understand it is okay if their strategies did not work. They were courageous and they learned what does not work. Sometimes getting things wrong is more informative than getting them right!

STUDENTS DO: Work on each number line, offering suggestions and strategies for filling in the missing numbers.

4. TEACHER DO: Pass out the math journals, saving one for yourself.

TEACHER SAY: Open your math journals to the next clean page.

STUDENTS DO: Open their math journals to the next clean page.

TEACHER SAY: Create a number line that shows 0, 1, 2, and 3. You can copy one of the number lines that we worked on together.

STUDENTS DO: Draw number lines in their math journals and add 0, 1, 2, and 3 to the number line.

TEACHER DO: Walk around the classroom to help students who need support. Consider allowing students to work with partners to help each other. Take note of students who may need additional instruction.

Share (5 mins)

Directions



1. TEACHER DO: Draw the dot arrangement examples below on the board or somewhere all students can see.

TEACHER SAY: Count the dots in both groups.

STUDENTS DO: Count the dots.

TEACHER SAY: How many are in the first group? How many are in the second group?

STUDENTS DO: Call out the answers.

TEACHER SAY: Why does the number stay the same even though the positioning of the dots changes?

TEACHER DO: Using **Calling Sticks**, select students to answer the question. Confirm students' thinking (or help students understand) that moving the dots around does not change how many dots there are.

Lesson 9 Overview

OUTCOMES

Students will:

- Identify the month, day, and date
- Count how many days they have been in school
- Write numbers 4 and 5
- Arrange numbers 0-5 on a number line

KEY VOCABULARY

- Month
- Day
- Zero
- Number line
- Math journal

MATERIALS

Calendar Math Area



Math Journal

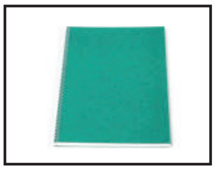
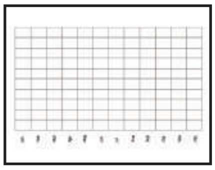


Chart paper, chalkboard/white-board, or overhead projector and markers



Birthday graph from previous lesson



OPTIONAL: Video Resources

TITLE: Representing Numbers

https://tinyurl.com/y9tq7oh3

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Who can tell me what month and year it is?

STUDENTS DO: Raise hands to volunteer. Selected student says the month and year.

TEACHER SAY: Yes, it is the month of (current month) in the year _______. Now you say it.

STUDENTS DO: Repeat the month and year.

2. TEACHER SAY: There are 12 months in a year. January, February, March, April, May, June, July, August, September, October, November, December. Now you say them with me.

STUDENTS DO: Repeat the months.

3. TEACHER DO: Point to the days of the week.

TEACHER SAY: There are 7 days in a week. They are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them with me.

STUDENTS DO: Repeat the days of the week.

4. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: Let's count to see how many days we have been in school.

TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

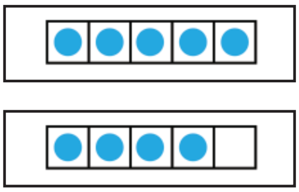
TEACHER SAY: How many straws are in the Ones pocket now? There were 8 straws in the Ones pocket and we added 1 straw today. (Count the straws.) Now we have 9 straws. We have been in school 9 days!

6. TEACHER DO: Circle 9 on the number chart.

TEACHER SAY: I drew a circle around the number 8 on the number chart to show how many days we have been in school. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

7. TEACHER DO: Draw one dot on the new five frame.



TEACHER SAY: I am drawing one dot for today in the square on the second five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

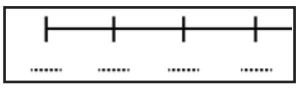
STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: There are 9 dots on our five frames and we have been in school 9 days!

Learn (25-30 mins)

Directions

1. TEACHER DO: Draw the example below.



TEACHER SAY: All of the numbers are missing from my number line! Can you help me fill in the missing numbers on my number line? My number line should include the numbers 0, 1, 2, and 3. Where do you think I should write the zero? Why do you think so?

TEACHER DO: Using **Calling Sticks**, select students to share their thinking. Continue until students have helped you fill in all of the blanks on the number line.

STUDENTS DO: Help the teacher fill in the blanks on the number line.

2. TEACHER DO: Hand out the math journals, saving one for yourself.

3. TEACHER SAY: Now that we are getting so good at working with numbers 0, 1, 2, and 3, we are going to practice writing the numbers 4 and 5. They can be a little tricky, so it is okay if you can do it perfectly today. Remember that we are just learning!

4. TEACHER DO: Write the number 4 on the board. Explain the steps for writing it.

TEACHER SAY: Look at the 4 I wrote on the board. First, let's write it in the air together.

STUDENTS DO: Write the number 4 in the air three times.

5. TEACHER SAY: In your math journal, practice writing the number 4 three times.

STUDENTS DO: Write the number 4 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

6. TEACHER SAY: Draw 4 dots in your math journal to show 4.

STUDENTS DO: Draw 4 dots in their journals.

7. TEACHER DO: Write the number 5 on the board. Explain the steps for writing it.

TEACHER SAY: Look at the 5 I wrote on the board. First, let's write it in the air together.

STUDENTS DO: Write the number 5 in the air three times.

8. TEACHER SAY: In your math journal, practice writing the number 5 three times.

STUDENTS DO: Write the number 5 three times in their math journals.

TEACHER DO: Walk around to monitor students' work and to provide support. Take note of students who may need additional instruction.

9. TEACHER SAY: Draw 5 dots in your math journal to show 5.

STUDENTS DO: Draw 5 dots in their journals.

10. TEACHER SAY: Let's look at our number line again. Where should we write 4 and 5? Talk to your Shoulder Partner about where you think the 4 and 5 should go.

STUDENTS DO: Talk to their shoulder partners about where the 4 and 5 go on the number line.

TEACHER SAY: Who would like to come up and show us where the 4 should go on the number line?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on a volunteer to show the class where the 4 should go on the number line. Repeat the process for 5.

Share (5 mins)

Directions

1. TEACHER DO: Draw 3 squares in a group, 3 dots horizontally in a group, and 3 stars vertically in a group so all students can see.

TEACHER SAY: How many objects are in each group? Talk with your Shoulder Partner about how the number in the groups stays the same even though the there are three different pictures and they are arranged differently.

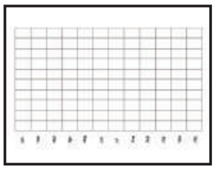
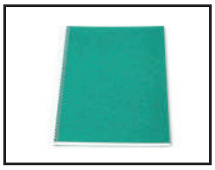
STUDENTS DO: Talk with their shoulder partners. Raise hands to share their thinking.

TEACHER DO: Call on students with raised hands to share their thinking

Lesson 10 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count how many days they have been in school • Collaborate to create an artistic representation of 1, 2, 3, 4, and 5	• Month • Day • Number line • Math journal	• Gather arts and crafts materials. See Lesson Materials for examples

MATERIALS

Calendar Math Area		Birthday graph from previous lesson	
Math Journal		Chart paper, chalkboard/whiteboard, or overhead projector and markers	
OPTIONAL Video Resources: TITLE: Representing Numbers https://tinyurl.com/y9tq7oh3		Arts and crafts materials: Large sheets of paper, of paper, scissors, glue, crayons or markers. Optional: newspapers or magazines, small recycled objects, such as buttons, pieces of fabric, or cotton balls (One set for each small group of students)	

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month) in the year ______. Now you say it.

STUDENTS DO: Repeat the month and year.

2. TEACHER DO: Point to each month on the birthday graph.

TEACHER SAY: There are 12 months in a year. They are January, February, March, April, May, June, July, August, September, October, November, December. Repeat them after me.

STUDENTS DO: Repeat the months of the year.

3. TEACHER DO: Point to the days of the week.

TEACHER SAY: There are 7 days in a week. They are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Repeat them after me.

STUDENTS DO: Repeat the days of the week.

4. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Now you say it.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: Let's count to see how many days we have been in school.

TEACHER DO: Take 1 straw (or stick or chenille stem) and ask a student to place it in the Ones pocket as they count, "One."

TEACHER SAY: How many straws are in the Ones pocket now? There were 9 straws in the Ones pocket and we added 1 straw today. (Count the straws.) How many days have we been in school?

STUDENTS DO: Respond to the question – 10!

6. TEACHER SAY: Wait! We have been in school for 10 days? Wow!
How many straws do we have now? Ten! We've been putting our straws into the Ones pocket. Each of these straws represents 1. But, these pockets in our Calendar Math Area have special rules.

- **Rule #1: Each pocket can only hold up to 9. So the Ones pocket can only hold 9 Ones! Now that we just added one, there are 10 Ones!**
- **Rule #2: Every time we get 10 Ones, we have to bundle them together and move the bundle to the Tens pocket. Let's do that now.**

TEACHER DO: Bundle the straws with a rubber band or string and ask a student to place the bundle in the Tens pocket.

TEACHER SAY: Who can tell the class what the rules are?

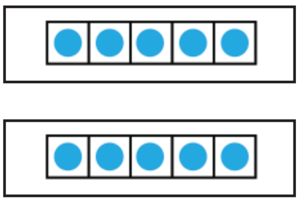
STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: Call on students to answer the question. Correct any misunderstandings and repeat the rules, if necessary.

7. TEACHER DO: Circle 10 on the number chart.

TEACHER SAY: I drew a circle around the number 10 on the number chart to show how many days we have been in school. Let's count the circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



8. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: I am drawing one dot for today in the square on the second five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 10 dots on the five frames. What do you notice about our five frames? What will we have to do the next time we count school days?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on volunteers to answer the question. Students should note that we will have to add a five frame to the Calendar Area.

Learn (25-30 mins)

Directions

1. TEACHER DO: Divide students into small groups of five or six. Distribute arts and crafts materials to each small group. Explain the directions for the activity.

TEACHER SAY: You have worked very hard to learn about the numbers 0 to 5. You have counted from 0 to 5, drawn objects to show those quantities, and helped me fill in numbers lines with those numbers.

Today, you're going to work with your classmates to create an art project that shows numbers 1-5. You will use whatever materials are available at your table to create a poster that shows 1 object, 2 objects, 3 objects, 4 objects, and 5 objects. You will have about 20 minutes to work. Do you have any questions?

STUDENTS DO: Raise hands to ask questions about the activity.

TEACHER DO: Answer students' questions and make sure everyone understands the directions.

STUDENTS DO: Work on their projects together.

TEACHER DO: Walk around the room to monitor students' work and offer support as needed. When students are finished, collect and display all posters.

Share (5 mins)

Directions

1. TEACHER DO: Hand out math journals and direct students to open them to the next clean page.

2. TEACHER SAY: Sometimes during our Share time, I might give you a problem to discuss with your Shoulder Partner and then share with the class. Today I have a problem for you and your Shoulder Partner.

Here is your problem: Adam has 5 marbles. What are some different ways you can show this? Work with your Shoulder Partner. Draw your ideas in your math journals.

STUDENTS DO: Work on the problem with their shoulder partners. Show their ideas in their math journals.

TEACHER DO: Walk around and monitor students' conversations and work. Offer support as needed. Using Calling Sticks, select student pairs to share their answers.

PRIMARY 1

Mathematics

Chapter 2

Lessons 11-18

Overview

Lessons 11-18

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :

- Count objects to tell how many there are
- Count by ones up to 20
- Read and write numerals from 0 up to 20
- Write numbers and represent quantities up to 20
- Understand the relationship between numbers and quantities up to 20
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.

NUMBERS AND OPERATIONS:

- Represent the component of numbers up to 10.

MEASUREMENT AND DATA:

- Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

CH 2 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
11	**Students will:** • Participate in Calendar Math activities • Count to 6 • Write the number 6 • Represent quantities using pictures • Answer questions about data
12	**Students will:** • Participate in Calendar Math activities • Count to 7 • Write the number 7 • Represent quantities using pictures • Answer questions about data
13	**Students will:** • Participate in Calendar Math activities • Count to 8 • Write the number 8 • Represent the quantity 8 using pictures • Answer questions about data
14	**Students will:** • Participate in Calendar Math activities • Count to 9 • Write the number 9 • Represent the quantity 9 using pictures • Answer questions about data
15	**Students will:** • Participate in Calendar Math activities • Count to 10 • Write the number 10 • Represent the quantity 10 using pictures • Answer questions about data
16	**Students will:** • Participate in Calendar Math activities • Count to 10 • Write the number 10 • Represent the quantity 10 using pictures • Answer questions about data

LESSON	INSTRUCTIONAL FOCUS
17	**Students will:** • Participate in Calendar Math activities • Count to 10 • Write numbers 0-10 • Represent quantities 0-10 using pictures • Answer questions about data
18	**Students will:** • Participate in Calendar Math activities • Count, read, and write up to 10 • Identify numbers that are 1 less and 1 more than a given number • Represent quantities from 1 to 10 using pictures

Lesson 11 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count to 6 • Write the number 6 • Represent quantities using pictures • Answer questions about data	• Calendar • Month • Day	• Create or print a five frame for the Calendar Math Area. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes. • Create a Favorite Day of the Week graph in the same style/ format as the Birthday Graph.

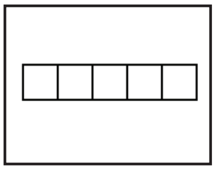
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

MATERIALS

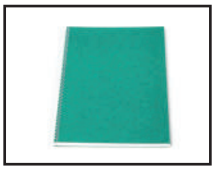
Calendar Math Area



Two Five Frames (for Learn)



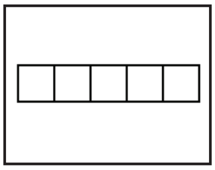
Math Journal



Sets of 10 counters (one set per pair of students)



Three Five Frames (total)



Favorite Day of the Week graph (See Lesson Preparation for the Teacher for instructions.)

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is time for Calendar! We counted and recorded how many boys and girls had a birthday in each month.

2. TEACHER DO: Point to the birthday graph. Point to each month and say them out loud.

TEACHER SAY: There are 12 months in a year. January February, March, April, June, July, August, September, October, November, December. Say them with me this time.

STUDENTS DO: Say the months of the year along with the teacher.

3. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: There are 7 days in a week. Let's say the days of the week together. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them.

STUDENTS DO: Say the days of the week with the teacher.

4. TEACHER SAY: Last week we talked about our birthday months and answered questions about the data we collected. Today we are going to create a new graph that shows data about our favorite days of the week. I am going to say the day of the week. If it is your favorite, raise your hand. You can only raise your hand one time. I am going to record your answer with an X above the day. Does anyone have any questions.

STUDENTS DO: Raise hands if they have questions.

TEACHER DO: Make sure all students understand the directions.

5. TEACHER DO: For each day of the week, say the name of the day and count how many students raise their hand.

STUDENTS DO: Raise their hands one time to choose their favorite day of the week.

TEACHER DO: Record student's answers with an X as they raise their hand. Each raised hand should be recorded as an X.

STUDENTS DO: Watch as the teacher counts hands and records the X's on the chart.

6. TEACHER SAY: Now we have completed our graph! Let's count the number of X's for each day and see how many students like each day of the week.

STUDENTS DO: Count the X's above each day along with the teacher.

TEACHER DO: Record the days and the number of votes each received where students can see the list.

7. TEACHER SAY: What do the numbers on the calendar mean?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Good! The numbers tell us the date and how many days are in each month.

8. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day), the (number date) of (month) in the year ______. Can you say the date, too?

STUDENTS DO: Repeat the date.

9. TEACHER SAY: How many days have we been in school? Let's find out!

TEACHER DO: Call on a student to take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

There were 10 straws in the Tens pocket and 0 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there is 1. I'm going to count them. (Count the straws.) Now we have 11 straws. How many days have we been in school?

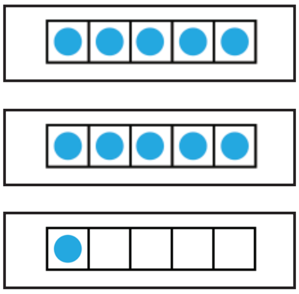
STUDENTS DO: Respond to the question – 11.

10. TEACHER SAY: Who can come up and circle 11 on the number chart?

STUDENTS DO: Raise hands to volunteer. Selected student will circle 11 on the number chart.

11. TEACHER DO: _______ drew a circle around the number 11 on the number chart to show thatwe have been in school 11 days. Let's count the numbers we have circled on our number chart so far. Say the numbers you know and listen to me say the numbers you do not know.

STUDENTS DO: Count along with the teacher. Say the numbers they know and listen to the teacher say the numbers they do not know.



12. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: **Remember we had to add a new five frame because we filled the first two. I am drawing one dot for today in the square on the new five frame. How many dots do we have on the five frames now? Count with me. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: **There are 11 dots on the five frames and we have been in school 11 days.**

Learn (25-30 mins)

Directions

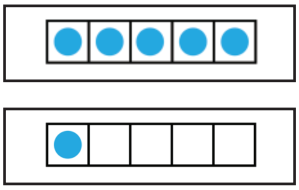
1. TEACHER SAY: **Last week we learned to count up to 5, draw pictures to show our numbers in different ways, and practiced writing and putting numbers in order. Today we are going to count to the number that comes after 5. Does anyone know what that is?**

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

2. TEACHER SAY: **That is correct! 1, 2, 3, 4, 5… 6! 6 is the number we are learning today.**

TEACHER SAY: **First, let's draw six dots in five frames. That will help us see how many 6 is.**



TEACHER DO: Draw six dots in the five frames.

3. TEACHER SAY: **When we draw six dots, we fill up one of the five frames and put one more dot in the next five frame. Will you help me count the dots?**

STUDENTS DO: Count the dots out loud with the teacher.

4. TEACHER SAY: **We can also show 6 using our fingers.**

TEACHER DO: Model how to use two hands to show 6.

TEACHER SAY: **Now you show 6 using your fingers.**

STUDENTS DO: Hold up 6 fingers.

5. TEACHER SAY: **Watch me as I write the number 6 on the board.**

TEACHER DO: Write the number 6 on the board.

TEACHER SAY: **Let's write the number 6 in the air together. Arms up, finger pencils ready!**

STUDENTS DO: Write 6 in the air three times with the teacher.

6. TEACHER SAY: **We will practice writing the number 6 in our math journals soon, but first,**

let's practice counting some objects.

We are going to work with our Shoulder Partners. I am going to hand out a bag of 10 ____ (objects of your choice) to each set of partners. Then, I will call out one of the numbers we've been working on.

Work with your partner to count out that many items. Take turns. If one partner counts them out, the other partner can count them again to be sure they are correct. Does anyone have any questions?

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Answer students' questions and make sure they understand the directions. Hand out math journals and bags of objects to each pair of students. (Students may work in groups of 3 if needed).

7. **TEACHER SAY: The first number I want you to count out is 3.**

STUDENTS DO: Count out 3 objects.

TEACHER DO: Walk around the room to offer support as needed.

8. **TEACHER SAY: Be sure your partner checks your work! How many ____ (items) do you have? Wonderful job!**

STUDENTS DO: Answer the question – 3.

TEACHER SAY: Right now we have 3 (objects). Put 2 more (objects) in the set. Now how many (objects) do you have?

STUDENTS DO: Count out 2 objects and add them to the set.

TEACHER DO: Walk around the room to offer support as needed.

9. **TEACHER SAY: Be sure your partner checks your work! How many ____ (items) do you have now?**

STUDENTS DO: Answer the question – 5.

10. **TEACHER SAY: Let's add one more (object) to the set.**

STUDENTS DO: Count out 1 object and add it to the set.

TEACHER DO: Walk around the room to offer support as needed.

11. **TEACHER SAY: Be sure your partner checks your work! How many ____ (items) do you have now?**

STUDENTS DO: Answer the question – 6.

TEACHER SAY: We just added objects to show 6, our special number today.

11. **TEACHER SAY: Now, let's try writing the number 6! Let's get out our math journals and turn to the next blank page.**

STUDENTS DO: Take out math journals and turn to the next blank page.

12. **TEACHER DO:** Point to the 6 you drew on the board.

TEACHER SAY: Remember how I wrote the number 6 earlier. Write the number 6 in your math journals three times.

STUDENTS DO: Write the number 6 in math journal three times.

TEACHER DO: Walk around the room and offer support to students as needed. Take note of students who may need additional instruction.

13. **TEACHER SAY: Great job! Now that you have written the number 6, let's practice drawing 6 objects. Listen to my story, and let's draw a picture to match the story.**

I was playing outside and decided to count the clouds in the sky. I looked up and saw six clouds up in the sky. Draw the clouds in your journal underneath the numbers you just drew..

TEACHER DO: Model on the board. Draw 6 clouds.

STUDENTS DO: Draw 6 clouds in their math journals.

TEACHER DO: Using **Calling Sticks**, call on a few volunteers to share their work with the class.

TEACHER SAY: You did a great job writing and counting the number 6!

Share (5 mins)

Directions

1. **TEACHER SAY: Today we learned about the number 6. Now I would like for you to turn to the next blank page in your math journal and draw a picture of what you think we will learn tomorrow in math.**

STUDENTS DO: Turn to the next blank page in math journal. Draw what they think they will learn tomorrow.

2. **TEACHER SAY: Now, let's share our drawing with our Shoulder Partners. Be sure to explain your drawing to your partner. Compare your drawings. How are the two the same or alike? How are they different?**

STUDENTS DO: Explain drawing to partner. Compare drawings. Discuss how they are the same and different?

TEACHER DO: Walk around the room and listen to students' conversations. Then, using **Calling Sticks**, select a pair of students to share their work.

TEACHER SAY: Tomorrow we will keep practicing counting and learn about a new and exciting number!

Lesson 12 Overview

OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count to 7 • Write the number 7 • Represent quantities using pictures • Answer questions about data	• Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

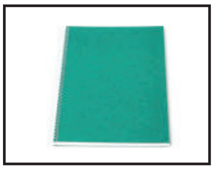
Calendar Math Area



Sets of 10 counters (one set per pair of students)

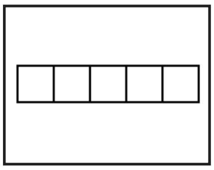


Math Journal



Favorite Day of the Week graph from previous lessons

Two Five Frames (for Learn)



Calendar (15-20 mins)

Directions

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **It is Calendar time! Let's get started!**

2. TEACHER DO: Point to the birthday graph. Point to each month and say them out loud.

TEACHER SAY: **Remember, there are 12 months in a year. January February, March, April, June, July, August, September, October, November, December. Will you say them with me this time?**

STUDENTS DO: Say the months of the year along with the teacher.

3. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: **There are 7 days in a week. Let's say them together: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Say the days of the week with the teacher.

4. TEACHER SAY: Yesterday, we counted and recorded our favorite day of the week. I drew an X above the day of the week to show your favorite days. Let's look at the graph. How many students chose Monday as their favorite day of the week?

STUDENTS DO: Respond with how many X's are above Monday on the graph.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day), the (number date) of (month) in the year ______. Can you say the date, too?

STUDENTS DO: Repeat the date.

6. TEACHER SAY: How many days have we been in school? Let's see!

TEACHER DO: Call on a student to take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

There were 10 straws in the Tens pocket and 1 straw in the Ones pocket. We added another straw to the Ones pocket today, so now there are 2. I'm going to count them. (Count the straws.) Now we have 12 straws. How many days have we been in school?

STUDENTS DO: Respond to the question – 12.

7. TEACHER SAY: Who can come up and circle 12 on the number chart?

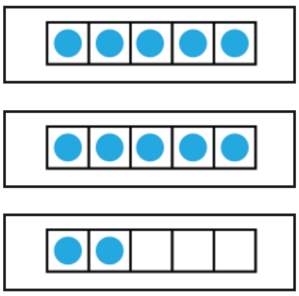
STUDENTS DO: Selected student will circle 12 on the number chart.

8. TEACHER SAY: ______ drew a circle around the number 12 on the number chart to show that we have been in school 12 days. Let us count together using our number chart the days we have circled so far. Say the numbers you know and listen to the me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

9. TEACHER SAY: Who would like to come up and add a dot to our five frames?

STUDENTS DO: Selected student adds a dot to the five frame.



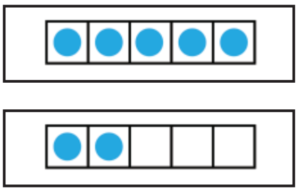
TEACHER SAY: ______ drew one dot for today on the new five frame. How many dots do we have on the five frames now? Count with me. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: There are 12 dots on the five frames and we have been in school 12 days.

Learn (25-30 mins)

Directions



1. TEACHER DO: Hand out math journals. Write the number 6 on the board.

2. TEACHER SAY: Let's play a quick counting game to review the number we learned yesterday – 6. The game is called Hops! We will all stand up and hop up and down on one foot while we count to one of our numbers! Are you ready? Stand up. Let's hop and count to the number 6.

STUDENTS DO: Stand up. Hop 6 times and count to 6.

3. TEACHER SAY: Today we are going to learn about the number that comes after 6 – 7. Let's draw seven dots in five frames. That will help us see how many 7 is.

TEACHER DO: Draw 7 dots in the five frames.

4. TEACHER SAY: When we draw 7 dots, we fill up one of the five frames and put 2 more dots in the next five frame. Will you help me count the dots?

STUDENTS DO: Count the dots out loud with the teacher.

5. TEACHER SAY: We can also show 7 using our fingers.

TEACHER DO: Model how to use two hands to show 7.

TEACHER SAY: Now you show 7 using your fingers.

STUDENTS DO: Hold up 7 fingers.

5. TEACHER SAY: Let's play Hops again, but this time we will hop 7 times on one foot.

STUDENTS DO: Stand up. Hop 7 times and count to 7.

6. TEACHER DO: Write the number 7 on the board.

TEACHER SAY: Let's practice writing 7. Stand up, arms out, fingers pencils ready!

STUDENTS DO: Write 7 in the air three times.

7. TEACHER SAY: Take out your math journals and turn to the next blank page.

STUDENTS DO: Take out math journals and turn to the next blank page.

TEACHER SAY: Write the number 7 three times in your math journal.

STUDENTS DO: Write 7 three times in their math journals.

8. TEACHER SAY: What should we draw to show 7?

STUDENTS DO: Raise hands to make suggestions.

TEACHER DO: Select one of the students' ideas. Direct students to draw 7 of the selected objects in their math journals.

STUDENTS DO: Draw 7 objects in their journals.

9. TEACHER SAY: Let's show the number 7 using our classmates! I am going to call some students to the front of the room for us to count.

TEACHER DO: Start by calling 3 students to the front of the room.

STUDENTS DO: Go to the front when called on by the teacher.

10. **TEACHER SAY: Let's count the number of students standing up here.**

STUDENTS DO: Count the number of students – 3.

TEACHER SAY: Great! We have 3 students. Now, I'm going to call up a few more to join our group.

TEACHER DO: Call up 3 more students to the front of the room.

STUDENTS DO: Go to the front when called on by the teacher.

11. **TEACHER SAY: Let's count the number of students standing up here now.**

STUDENTS DO: Count the number of students – 6.

TEACHER SAY: Great! We have 6 students. How many more students should I call up to make a group of 7 students?

STUDENTS DO: Raise hands to answer the question. Explain how they know that they need to add 1 more student to the group to make 7.

TEACHER DO: Call up 1 more student to the front of the room.

STUDENTS DO: Go to the front when called on by the teacher.

12. **TEACHER SAY: Let's count the number of students standing up here now.**

STUDENTS DO: Count the number of students – 7.

TEACHER SAY: That's right! We kept adding more and more students until we showed our number today – 7!

Share (5 mins)

Directions

1. **TEACHER DO:** Draw 6 stars and 1 moon on the board.

TEACHER SAY: The last thing we're going to do in math today is discuss a problem with your Shoulder Partner. On the board I have drawn 6 stars and 1 moon.

Talk to your partner about what I drew. How many stars did I draw? How many moons are there? Do my moon and stars still give me the number 6 if I count all of them?

STUDENTS DO: Talk to partner about the drawing on the board

TEACHER DO: Walk around the room and listen to students' conversations. Take note of interesting perspectives on the problem. Using **Calling Sticks**, select a pair of students to share their thinking.

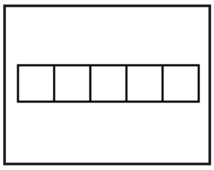
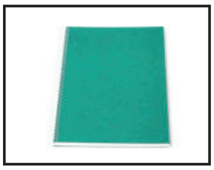
STUDENTS DO: Share their thinking with their classmates.

Lesson 13 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count to 8
- Write the number 8
- Represent the quantity 8 using pictures
- Answer questions about data

MATERIALS

Calendar Math Area		Two Five Frames (for Learn)	
Math Journal		Favorite Day of the Week graph from previous lesson	

Calendar (15-20 mins)

Directions

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is time for Calendar!

TEACHER DO: Point to each month and say them out loud.

2. TEACHER SAY: There are 12 months in a year. They are January February, March, April, June, July, August, September, October, November, December. Now you say them.

STUDENTS DO: Say the months of the year along with the teacher.

3. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: There are 7 days in a week. Say them with me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say the days of the week with the teacher.

4. TEACHER SAY: Remember the class graph we made where we recorded our favorite days of the week? Let's look at that now. Who can tell me how many students chose Wednesday as their favorite day of the week?

STUDENTS DO: Raise hands to volunteer. Selected student answers the question.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

6. TEACHER SAY: **How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

TEACHER DO: Using Calling Sticks, select a student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

7. TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 2 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 3. I'm going to count them. (Count the straws.) Now we have 13 straws. How many days have we been in school?**

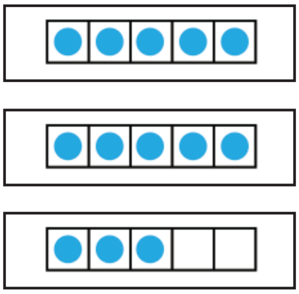
STUDENTS DO: Answer the question – 13.

8. TEACHER SAY: **Who can come up and circle 13 on the number chart?**

STUDENTS DO: Selected student will circle 13 on the number chart.

TEACHER DO: ______ drew a circle around the number 13 on the number chart to show that we have been in school for 13 days. Let's count the circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



9. TEACHER DO: Draw one dot on the third five frame.

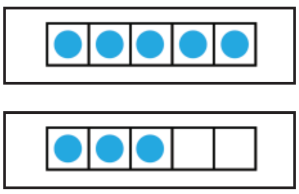
TEACHER SAY: **I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Count with me. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: **There are 13 dots on the five frames and we have been in school 13 days.**

Learn (25-30 mins)

Directions



1. TEACHER SAY: **This week, we have learned 6 and 7. Today we are going to learn the next number – 8. Let's use our five frames to see how much 8 is.**

TEACHER DO: Draw 8 dots in the five frames.

TEACHER SAY: **When we draw 8 dots, we fill up one of the five frames and put 3 more dots in the next five frame. Will you help me count the dots?**

STUDENTS DO: Count the dots out loud with the teacher.

2. TEACHER SAY: **We can also show 8 using our fingers.**

TEACHER DO: Model how to use two hands to show 8.

TEACHER SAY: **Now you show 8 using your fingers.**

STUDENTS DO: Hold up 8 fingers.

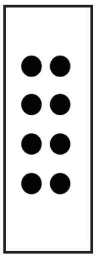
3. TEACHER SAY: Yesterday we played a counting game called Hops to help us count to 7. Today we are going to play it again. This time, we are going to hop and count up to the number 8. We will hop and count to 8 three times. Ready?

STUDENTS DO: Stand up. Hop up on one foot as they count to the number 8. Repeat game 2 times.

4. TEACHER SAY: Great job! Watch me as I write the number 8 on the board.

TEACHER DO: Write the number 8 on the board.

STUDENTS DO: Observe as the teacher writes 8 on the board.



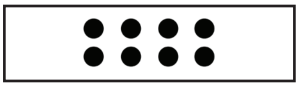
5. TEACHER SAY: Now, watch me draw some dots on the board.

TEACHER DO: Draw 8 dots on the board in two columns.

TEACHER SAY: Count these dots with me.

STUDENTS DO: Count the dots together.

TEACHER DO: Write the number 8 next to the dots.



6. TEACHER DO: Draw 8 dots on the board in two rows.

TEACHER SAY: Count these dots with me.

STUDENTS DO: Count the dots together.

TEACHER DO: Write the number 8 next to the dots.

7. TEACHER DO: Ask students questions about the dot arrangements. Select students to answer and allow time for them to share their thinking.

TEACHER SAY: Are all of these dots drawn the same? Even though they are drawn differently, do they all show 8 dots? How did you know there were eight dots in each drawing?

STUDENTS DO: Raise hand to answer the questions. (No) (Yes) (I counted them.)

TEACHER SAY: This tells us that quantities – or amounts – like 8 can look different. We have to count them to know for sure how many there are.

8. TEACHER DO: Hand out math journals.

TEACHER SAY: Let's practice writing the number 8. First, let's write 8 in the air. Stand up, arms out, finger pencils ready!

STUDENTS DO: Write the number 8 in the air with the teacher three times.

9. TEACHER SAY: Open your math journals to the next blank page.

STUDENTS DO: Take out math journal and turn to the next blank page.

TEACHER SAY: Now let's write the number 8 in our journals. Write it three times.

STUDENTS DO: Write the number 8 three times in journal.

TEACHER DO: Walk around the room and provide support to students as needed. Take note of students who may need additional instruction.

10. TEACHER SAY: Draw 8 dots in your math journal to show how much 8 is.

STUDENTS DO: Draw 8 dots in their math journals.

TEACHER DO: Walk around the room and provide support to students as needed.

Share (5 mins)

Directions

1. **TEACHER SAY:** **Share your drawing of 8 dots with your Shoulder Partner and compare them. I'm going to ask you some questions. Take 2 minutes to talk about them with your Shoulder Partner, then we will discuss them together.**
   - **Did both of you draw your dots the same way?**
   - **Did they go side to side or up and down or in one long row?**
   - **Or did you sprinkle them all around?**
   - **Does it matter how you draw them? Does it change the total number of dots?**

STUDENTS DO: Share drawing with partner. Discuss their dot arrangements and how different arrangements affect the total number of dots.

TEACHER SAY: **Now, let's talk about it together.**

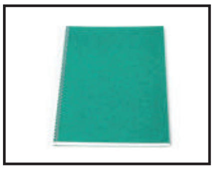
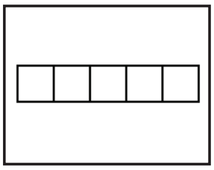
TEACHER DO: Using **Calling Sticks**, call on students to answer the discussion questions and share their thinking.

STUDENTS DO: Share their thinking. Conclude that it does not matter how the dots are arranged. 8 dots will always be 8 dots.

Lesson 14 Overview

OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count, read, and write 9 • Represent the quantity 9 using pictures • Answer questions about data	• Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area		Sets of 10 counters (one set per pair of students)	
Math Journal		Favorite Day of the Week graph from previous lessons	
Two Five Frames (for Learn)			

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is time for Calendar!

TEACHER DO: Point to each month and ask students to repeat them after you.

STUDENTS DO: Repeat the months after the teacher.

TEACHER SAY: How many months are in a year?

STUDENTS DO: Answer the question – 12.

2. TEACHER DO: Point to the days of the week and ask students to repeat them after you.

STUDENTS DO: Repeat the days of the week after the teacher.

TEACHER SAY: How many days are in a week?

STUDENTS DO: Answer the question – 7.

3. TEACHER SAY: **I have another question about our class graph that we made! Who can tell me how many students chose Friday as their favorite day of the week?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Answer the question. If student is incorrect, let them come up and count the X's.

4. TEACHER SAY: **Who can come up and help us figure out what today's date is?**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student to come up and help determine today's date. Guide the student to look for the day, the date (number on the calendar for today), the month, and the year. Help the student say the date aloud.

TEACHER SAY: **(With the student) Today is (day) the (date) of (month) (year). Now everyone say the date together.**

STUDENTS DO: Repeat the date.

5. TEACHER SAY: **How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 3 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 4. I'm going to count them. (Count the straws.) Now we have 14 straws. How many days have we been in school?**

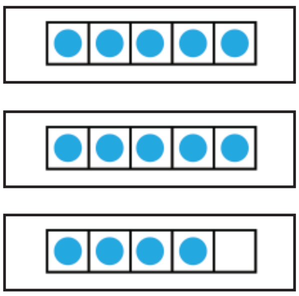
STUDENTS DO: Answer the question – 14.

6. TEACHER SAY: **Who can come up and circle 14 on the number chart?**

STUDENTS DO: Selected student will circle 14 on the number chart.

TEACHER DO: ______ drew a circle around the number 14 on the number chart to show that we have been in school 14 days. Let's count the circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



13. TEACHER DO: Draw one dot on the third five frame.

TEACHER SAY: **I drew one dot for today in the square on the five frame. How many dots do we have on the five frames now? Count with me. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: **There are 14 dots on the five frames and we have been in school 14 days!**

Learn (25-30 mins)

Directions

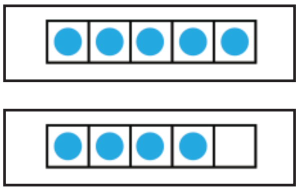
1. TEACHER SAY: Yesterday we practiced counting up to and writing the number 8. Who can tell me what number comes after 8?

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: The number that comes after 8 is 9. We are learning 9 today!

2. TEACHER SAY: Let's use our five frames to see how much 9 is.



TEACHER DO: Draw 9 dots in the five frames.

TEACHER SAY: When we draw 9 dots, we fill up one of the five frames and put 4 more dots in the next five frame. Will you help me count the dots?

STUDENTS DO: Count the dots out loud with the teacher.

3. TEACHER SAY: We can also show 9 using our fingers.

TEACHER DO: Model how to use two hands to show 9.

TEACHER SAY: Now you show 9 using your fingers.

STUDENTS DO: Hold up 9 fingers.

4. TEACHER SAY: Let's play Hops to help us count to 9. We are going to hop and count up to the number 9. We will hop and count to 9 three times. Ready?

STUDENTS DO: Stand up. Hop up on one foot as they count to the number 9. Repeat game 2 times.

5. TEACHER SAY: Great job! Watch me as I write the number 9 on the board.

TEACHER DO: Write the number 9 on the board.

STUDENTS DO: Observe as the teacher writes 9 on the board.

6. TEACHER SAY: We will practice writing the number 9 in our math journals soon, but first, let's practice counting some objects.

We are going to work with our Shoulder Partners. I am going to hand out a bag of ____ (objects of your choice) to each set of partners. Then, I will call out one of the numbers we have been learning. I want you to work with your partner to count out that many objects. Take turns. If one partner counts them out, the other partner can count them again to be sure they are correct.

TEACHER DO: Pass out bags of objects to each pair of students. (Students may work in groups of 3 if needed).

7. TEACHER SAY: The first number I want you to count out is 4.

STUDENTS DO: Count out 4 objects.

TEACHER DO: Walk around the room to offer support as needed.

8. TEACHER SAY: Be sure your partner checks your work! How many ____ (items) do you have?

STUDENTS DO: Call out the answer – 4.

9. TEACHER SAY: Wonderful job! Right now we have 4 (objects). Put 3 more (objects) in the set.

STUDENTS DO: Count out 3 objects and add them to the set. Count the objects all together to see how many they have.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Be sure your partner checks your work! How many ____ (objects) do you have now?

STUDENTS DO: Call out the answer – 7.

10. TEACHER SAY: Great! Let's add two more (objects) to the set.

STUDENTS DO: Count out 2 objects and add it to the set. Count the objects all together to see how many they have.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Be sure your partner checks your work! How many ____ (objects) do you have?

STUDENTS DO: Call out the answer – 9.

TEACHER SAY: Awesome work! We just added objects to show 9, our special number today.

11. TEACHER SAY: Now, let's try writing the number 9!

TEACHER DO: Hand out math journals.

TEACHER SAY: Let's look at the 9 I wrote on the board. Now watch as I write a 9 in the air.

STUDENTS DO: Observe the teacher writing the number 9.

TEACHER SAY: Stand up, arms out, finger pencils ready! Write the number 9 in the air with me three times.

STUDENTS DO: Write the number 9 in the air three times.

12. TEACHER SAY: Open your math journals and turn to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Write the number 9 in your math journal three times.

STUDENTS DO: Write the number 9 in their math journals three times..

TEACHER DO: Walk around the room and offer support to students as needed. Take note of students who may need additional instruction.

13. TEACHER SAY: Great job! Now that you have written the number 9, let's practice drawing 9objects. Listen to my story, and let's draw a picture to match the story.

I was walking to school today and I saw a man selling beautiful loaves of bread. I counted 9 loaves of bread! Draw 9 loaves of bread in your math journal.

TEACHER DO: Model on the board. Draw 9 loaves of bread.

STUDENTS DO: Draw 9 loaves of bread in their math journals.

TEACHER SAY: You did a wonderful job writing and counting the number 9. Everyone hold up their math journals and show your pictures of 9 loaves of bread.

Share (5 mins)

Directions

1. **TEACHER SAY: For sharing today, I would like for you to practice counting from 1-9 with your Shoulder Partner. Take turns counting. You each need to count to 9 two times.**

STUDENTS DO: Take turns counting from 1-9 with partner. Repeat.

Lesson 15 Overview

OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Mathnactivities • Count to 10 • Write the number 10 • Represent the quantity 10 using pictures • Answer questions about data	• Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

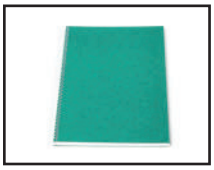
Calendar Math Area



Sets of 10 counters (one set per pair of students)

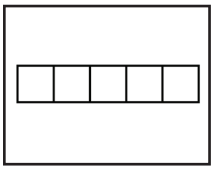


Math Journal



Favorite Day of the Week graph from previous lesson

Two Five Frames (for Learn)



Calendar (15-20 mins)

Directions

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Let's get started with Calendar! Remember, the calendar helps us keep track of what the month and day is. It also helps us keep track of how many days we've been at school.

2. TEACHER DO: Point to the birthday graph. Point to each month and say them out loud.

TEACHER SAY: There are 12 months in a year. January February, March, April, June, July, August, September, October, November, December. Will you say them with me this time?

STUDENTS DO: Say the months of the year along with the teacher.

3. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: Let's say the days of the week together. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

4. STUDENTS DO: Say the days of the week with the teacher.

5. TEACHER SAY: **Who can come up and help us figure out what today's date is?**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student to come up and help determine today's date. Guide the student to look for the day, the date (number on the calendar for today), the month, and the year. Help the student say the date aloud.

TEACHER SAY: **(With the student) Today is (day) the (date) of (month) (year). Now everyone say the date together.**

STUDENTS DO: Repeat the date.

5. TEACHER SAY: **I have a new question about our Favorite Day of the Week class graph that we made! Which day has the fewest (or smallest) number of X's above it? What do you think that means?**

STUDENTS DO: Raise hands to answer question.

TEACHER DO: Using **Calling Sticks**, select several students to share their thinking. If needed, explain that it is the least favorite day – the smallest number of students chose it as their favorite day.

6. TEACHER SAY: **How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

7. TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 4 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 5. I'm going to count them. (Count the straws.) Now we have 15 straws. How many days have we been in school?**

STUDENTS DO: Answer the question – 15.

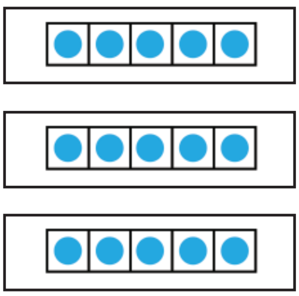
8. TEACHER SAY: **Who can come up and circle 15 on the number chart?**

STUDENTS DO: Selected student will circle 15 on the number chart.

TEACHER DO:______ drew a circle around the number 15 on the number chart to show how many days we have been in school. Let's count our circled numbers together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

5. TEACHER DO: Draw one dot on the new five frame.



TEACHER SAY: **I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: **There are 15 dots on the five frames. We have been in school 15 days! What do you notice about our five frames? What will we have to do the next time we count school days?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on volunteers to answer the question. Students should note that we will have to add a five frame to the Calendar Area.

Learn (25-30 mins)

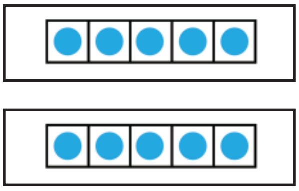
Directions

1. **TEACHER SAY: We have learned so many numbers! So far we have learned to count, read, and write our numbers up to 9. Today we are going to keep counting on. 1, 2, 3, 4, 5, 6, 7, 8, 9. Does anyone know what comes next?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Ten comes next! Ten is the number we are learning today. That's the largest number we've learned so far!

2. **TEACHER SAY: First, let's draw 10 dots in our 5 frames to see what 10 looks like.**



TEACHER DO: Draw ten dots in the five frames.

3. **TEACHER SAY: Will you help me count our dots?**

STUDENTS DO: Count the dots aloud.

4. **TEACHER SAY: What do you notice about our two five frames?**

STUDENTS DO: Answer question – they are full.

5. **TEACHER SAY: That's right! 10 dots fills up both of our five frames. Watch me as I write thenumber 10 on the board. The number ten is a little different than the other numbers we've-learned. The number 10 has two digits (or numbers) in it. Let's say the word *digits* together..**

STUDENTS DO: Say digits with the teacher.

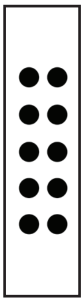
6. **TEACHER SAY: When we write the number 10, we write a 1 and then a 0. When we write 10 we put the one and the 0 right beside each other.**

TEACHER DO: Write the number 10 on the board.

7. **TEACHER SAY: We can show 10 in several different ways. Show me 10 on your fingers.**

STUDENTS DO: Hold up 10 fingers in the air.

TEACHER SAY: Great job! Look! To show 10 on our fingers we have to use all 10 fingers on both of our hands. You are all holding up all 10 fingers. Now, watch me draw some dots on the board.

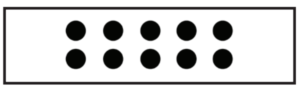


8. **TEACHER DO:** Draw 10 dots on the board in two columns.

TEACHER SAY: Count these dots with me.

STUDENTS DO: Count the dots together.

TEACHER DO: Write the number 10 next to the dots.



9. **TEACHER DO:** Draw 10 dots on the board in two rows.

TEACHER SAY: Count these dots with me.

STUDENTS DO: Count the dots together.

TEACHER DO: Write the number 10 next to the dots.

10. TEACHER SAY: Are all of these dots drawn the same? How did you know there were nine dots in each drawing?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Answer the questions.

TEACHER SAY: We know that no matter how we draw the dots or picture, we have to count them to tell how many there are. And, it doesn't matter how we arrange the 10 dots. If we draw 10 dots, there will be 10 dots. Do you have any questions?

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Answer questions for students to help clear up misunderstandings or misconceptions.

11. TEACHER SAY: Let's practice writing the number 10. We will write it in the air first. Stand up, arms out, finger pencils ready! Write with me.

TEACHER DO: Write the number 10 in the air three times.

STUDENTS DO: Write the number 10 in the air three times along with the teacher.

12. TEACHER DO: Hand out math journals.

TEACHER SAY: Open your journals to the next blank page.

STUDENTS DO: Open math journal to the next blank page.

13. TEACHER DO: Point to the number 10 on the board.

TEACHER SAY: Write the number 10 three times in your journal.

STUDENTS DO: Write the number 10 three times in their math journals.

TEACHER DO: Walk around the room and provide support to students as needed. Take note of students who may need additional instruction.



14. TEACHER SAY: Now that you have finished, I want you to trace both of your hands in your math journals. Work with your Shoulder Partner and help each other.

TEACHER DO: Trace both of your hands on the board (or overhead projector) to model for students.

STUDENTS DO: Work with their shoulder partners to trace both of their hands in your journal.

TEACHER SAY: Now, practice writing your numbers in order on each of your fingers. Start at 1 and stop at 10. If you're not sure what to do, watch me.

TEACHER DO: Model writing the number 1 on 1 finger. Continue to number fingers to 10.

STUDENTS DO: Write the numbers 1-10 on their fingers in their math journals.

TEACHER DO: Walk around the room and provide support to students as needed. Take note of students who may need additional instruction.

TEACHER SAY: Great job today! Tomorrow we will continue to practice counting to and writing our numbers to 10.

Share (5 mins)

Directions

1. TEACHER DO: The last thing we're going to do in math today is share with your **Shoulder Partner**. I want you to tell your partner one thing you learned today about the number 10.

STUDENTS DO: Tell partners one thing they learned about the number 10 today. Possible answers may include: it has two digits, we use two full hands to show it, it is written with a 1 and a 0, it fills up two five frames.)

TEACHER DO: Walk around the room and listen to student's talking. Then, using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Share their thinking about 10.

Lesson 16 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count to 10
- Write the number 10
- Represent the quantity 10 using pictures
- Answer questions about data

LESSON PREPARATION FOR THE TEACHER

- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

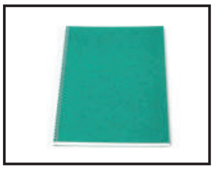
Calendar Math Area



Sets of 10 counters (one set per pair of students)

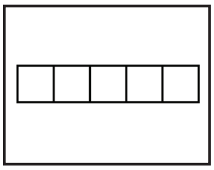


Math Journal



Favorite Day of the Week graph from previous lesson

Four Five Frames (for Learn)



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the birthday graph. Point to each month and say them out loud.

TEACHER SAY: There are 12 months in a year. January February, March, April, June, July, August, September, October, November, December. Will you say them with me this time?

STUDENTS DO: Say the months of the year along with the teacher.

2. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: There are 7 days in a week. Let's say the days of the week together. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say the days of the week with the teacher.

3. TEACHER SAY: I have a new question about our Favorite Day of the Week graph! Which day has the most number of X's above it? What do you think that means?

STUDENTS DO: Raise hand to answer question.

TEACHER DO: Using **Calling Sticks**, select several students to share their thinking. If needed, explain that it is the most favorite day – the greatest number of students chose it as their favorite day.

4. TEACHER SAY: Who can come up and help us figure out what today's date is?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student to come up and help determine today's date. Guide the student to look for the day, the date (number on the calendar for today), the month, and the year. Help the student say the date aloud.

TEACHER SAY: (With the student) Today is (day) the (date) of (month) (year). Now everyone say the date together.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

6. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 5 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 6. I'm going to count them. (Count the straws.) Now we have 16 straws. How many days have we been in school?

STUDENTS DO: Answer the question – 16.

7. TEACHER SAY: Who can come up and circle 16 on the number chart?

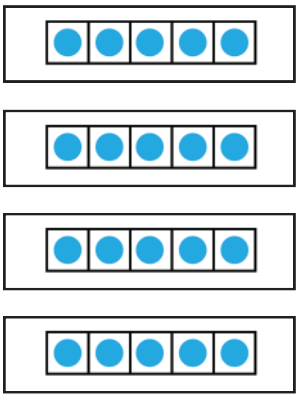
STUDENTS DO: Selected student will circle 16 on the number chart.

TEACHER DO: ______ drew a circle around the number 16 on the number chart to show how many days we have been in school. Let us count together using our number chart the days we have circled so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

8. TEACHER SAY: Remember that we filled up our last five frame so we need to add another one.

TEACHER DO: Draw one dot on the new five frame.



TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 16 dots on the five frames. We have been in school 16 days!

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Let's play a different game to count to 10 – Counting Classmates. I will start by pointing at the first student. That student will say, "One" and come up to the front of the room. Then I will point to another student. That students will say, "Two" and come up to the front of the room. We will continue until we get to 10. Then we will count back to our seats.**

TEACHER DO: Point to one student at a time until 10 students are at the front of the room.

STUDENTS DO: Selected students will say the next number in the count up to 10 and come up to the front of the room.

2. **TEACHER SAY: Now I will count you all back to your seats. The first student I point to will say, "One" and go back to their seat. We will continue until all 10 students are seated.**

TEACHER DO: Point to one student at a time until all 10 students are back at their seats.

STUDENTS DO: Count themselves back to their seats until all 10 students are seated again.

3. **TEACHER SAY: We are going to work with our Shoulder Partners. I am going to hand out a bag of 10 (objects) to each set of partners. Then, I will call out one of the numbers we have been studying. Work with your partner to count out that many items. Take turns. If one partner counts them out, the other partner can count them again to be sure they are correct.**

TEACHER DO: Hand out bags of objects to each pair of students. (Students may work in groups of 3 if needed).

4. **TEACHER SAY: The first number I want you to count out is 3.**

STUDENTS DO: Count out 3 objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Be sure your partner checks your work! How many (objects) do you have?

STUDENTS DO: Answer the question – 3.

5. **TEACHER SAY: Wonderful job! Now, I want you to add more (objects) until you have a set of 10. So start at 3 and count up to 10.**

STUDENTS DO: Add more objects to their sets of 3 until they have 10.

6. **TEACHER SAY: How many ____ (objects) do you have now?**

STUDENTS DO: Answer the question – 10.

TEACHER SAY: Good! Put all your (objects) back in one pile. Now I want you to count out 7.

STUDENTS DO: Count out 7 objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Be sure your partner checks your work! How many (objects) do you have?

STUDENTS DO: Answer the question – 7.

7. **TEACHER SAY: Wonderful job! Now, I want you to add more objects so that you have a set of 10. So start at 7 and count up to 10.**

STUDENTS DO: Add more objects to your set of 7 until you have 10.

TEACHER SAY: How many (objects) do you have now?

STUDENTS DO: Answer the question – 10.

TEACHER SAY: Good! Now, please put all your (objects) away.

STUDENTS DO: Put objects away so they can be collected.

8. TEACHER SAY: Remember, the number 10 has two digits, or numbers when we write it. We start with a 1 and the write a 0 right beside it. Let's write all of the numbers we have learned in the air – from 0 all the way to 10. Stand up, arms out, finger pencils ready!

TEACHER DO: Write the numbers from 0 to 10 in the air.

STUDENTS DO: Write the numbers from 0 to 10 in the air along with the teacher.

Share (5 mins)

Directions

1. TEACHER DO: Hand out math journals and direct students to open to the next blank page.

STUDENTS DO: Open their math journals to the next blank page.

2. TEACHER SAY: Draw a set of 10 objects in your math journal. These can be circles, flowers, stars, or anything you like. After you draw 10 objects, write the number 10.

STUDENTS DO: Draw 10 objects and write the number 10 in their math journals.

TEACHER DO: Walk around the room and offer support to students as needed. Take note of students who may need additional instruction.

3. TEACHER SAY: When you are finished I want you to swap journals with Shoulder Partner. Your Shoulder Partner will count your objects and check to be sure there are 10.

STUDENTS DO: Swap math journals with their partners and check each other's work.

Lesson 17 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count to 10
- Write numbers 0-10
- Represent quantities 0-10 using pictures
- Answer questions about data

LESSON PREPARATION FOR THE TEACHER

- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

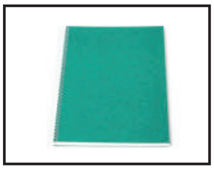
Calendar Math Area



Sets of 10 counters (one set per pair of students)



Math Journal



Favorite Day of the Week graph from previous lesson

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the months on the birthday graph.

TEACHER SAY: There are 12 months in a year. January February, March, April, June, July, August, September, October, November, December. Say them with me.

STUDENTS DO: Say the months of the year along with the teacher.

2. TEACHER DO: Point to the days of the week as you name them aloud.

TEACHER SAY: There are 7 days in a week. Let's say the days of the week together. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them with me.

STUDENTS DO: Say the days of the week with the teacher.

3. TEACHER SAY: I have one more question about our "Favorite Day of the Week" graph! If I counted all of the X's on the graph, what would it tell me?

STUDENTS DO: Students raise hand to answer question.

TEACHER DO: Using **Calling Sticks**, select several students to share their thinking. If necessary, explain that counting all of the X's would tell us how many people voted and the number of students in the class.

4. TEACHER SAY: Who can come up and help us figure out what today's date is?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student to come up and help determine today's date. Guide the student to look for the day, the date (number on the calendar for today), the month, and the year. Help the student say the date aloud.

TEACHER SAY: (With the student) Today is (day) the (date) of (month) (year). Now everyone say the date together.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

6. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 6 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 7. I'm going to count them. (Count the straws.) Now we have 17 straws. How many days have we been in school?

STUDENTS DO: Answer the question – 17.

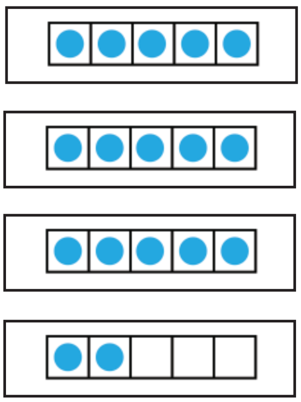
7. TEACHER SAY: Who can come up and circle 17 on the number chart?

STUDENTS DO: Selected student will circle 17 on the number chart.

TEACHER DO: ______ drew a circle around the number 17 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

6. TEACHER DO: Draw one dot on the new five frame.



TEACHER SAY: I am drawing one dot for today in the square on the five frame to show how many days we have been in school. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 17 dots on the five frames. We have been in school 17 days!

Learn (25-30 mins)

Directions

1. TEACHER SAY: So far we have learned all about our numbers from 1-10! Let's count to 10 together!

STUDENTS DO: Count to 10 together.

2. TEACHER DO: Hand out math journals. Direct students to open their math journals to the next blank page.

STUDENTS DO: Take out math journal and turn to the next blank page.

3. TEACHER SAY: Today we are going to practice counting and drawing sets of numbers in our math journal. I am going to tell you some stories and I want you to draw objects to match the story! Ready? Here's the first story.

I was walking down the street when I saw some spiders! I found 6 big spiders and 4 little spiders. Draw the 6 big spiders and 4 little spiders in your journal.

TEACHER DO: Model how to draw a simple spider – a circle and some lines for legs, plus dots for eyes.

STUDENTS DO: Draw 6 big spiders and 4 little spiders in their math journals.

4. TEACHER SAY: Now, let's count all of the spiders. Count with me.

STUDENTS DO: Count the spiders with the teacher.

TEACHER SAY: We have 10 spiders. Let's write the number 10 next to our spiders. Remember, the number 10 has two numbers or digits. We write a 1 and then a 0 right next to it. That is great! Let's do another story. Go to the next blank page in your journal.

STUDENTS DO: Go to the next blank page.

5. TEACHER SAY: I love to collect shells! I have 3 circle shells and 4 triangle shells. Draw my shells in your journal.

TEACHER DO: Model how to draw a circle and a triangle on the board.

STUDENTS DO: Draw 3 circle shells and 4 triangle shells in their math journals.

6. TEACHER SAY: Now, let's count all of the shells. Count with me.

STUDENTS DO: Count the shells with the teacher.

TEACHER SAY: We have 7 shells. Let's write the number 7 next to our shells. That is great! Let's do one more story. Go to the next blank page in your journal.

STUDENTS DO: Go to the next blank page.

7. TEACHER SAY: I have a set of crayons. 7 crayons are little and 2 crayons are big. Draw the 7 little crayons and 2 big crayons in your journal.

TEACHER DO: Model how to draw crayons on the board.

STUDENTS DO: Draw 7 little crayons and 2 big crayons in their math journals.

8. TEACHER SAY: Now, let's count all of the crayons. Count with me.

STUDENTS DO: Count the crayons with the teacher.

TEACHER SAY: We have 9 crayons. Let's write the number 9 next to our crayons. Wow! You all did a wonderful job! Keep your journals out for a few more minutes.

Share (5 mins)

Directions

1. **TEACHER SAY: Share your drawings we did today with your Shoulder Partner. How did you each draw your objects? Did you draw them straight across? Did you draw them up and down? Why did you choose to draw them that way? Talk about your thinking with your Shoulder Partner. You have about 3 minutes.**

STUDENTS DO: Discuss drawings from today with their partners.

TEACHER DO: Walk around the room and offer support to students as needed. Take note of students who may need additional help.

2. **TEACHER SAY: Does it matter how we choose to draw our objects when we're counting them? How do we know how many are in a set?**

STUDENTS DO: Answer questions.

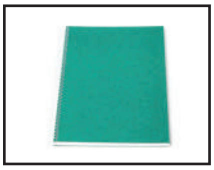
3. **TEACHER SAY: It doesn't really matter how we draw them. We just have to be able to count them to tell how many are in a set.**

Lesson 18 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count, read, and write up to 10
- Identify numbers that are 1 less and 1 more than a given number
- Represent quantities from 1 to 10 using pictures

MATERIALS

Calendar Math Area		Bags of 10 small objects (beans, straws, rocks, etc.) per 2 students to model 9	
Math Journal		Favorite Day of the Week graph from previous lesson	

Calendar (15-20 mins)

Directions

1. TEACHER SAY: It is time for Calendar!

TEACHER DO: Point to the birthday graph. Point to each month and say them out loud.

2. TEACHER SAY: Who remembers how many months are in a year?

TEACHER DO: Using **Calling Sticks**, select a students to answer

3. TEACHER SAY: That's right! There are 12 months in a year. They are January February, March, April, June, July, August, September, October, November, December. Now you say them.

STUDENTS DO: Say the months of the year along with the teacher.

4. TEACHER DO: Point to the days of the week.

TEACHER SAY: There are 7 days in a week. They are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Now you say them.

STUDENTS DO: Say the days of the week with the teacher.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Who can come up and help us figure out what today's date is?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student to come up and help determine today's date. Guide the student to look for the day, the date (number on the calendar for today), the month, and the year. Help the student say the date aloud.

TEACHER SAY: (With the student) Today is (day) the (date) of (month) (year). Now everyone say the date together.

STUDENTS DO: Repeat the date.

6. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

9. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 7 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 8. I'm going to count them. (Count the straws.) Now we have 18 straws. How many days have we been in school?

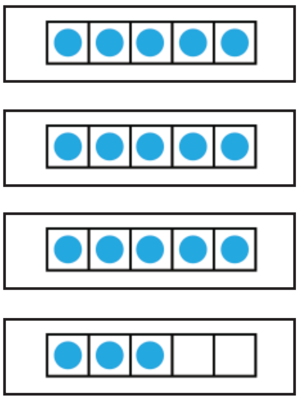
STUDENTS DO: Answer the question – 18.

10. TEACHER SAY: Who can come up and circle 18 on the number chart?

STUDENTS DO: Selected student will circle 18 on the number chart.

TEACHER DO:______ drew a circle around the number 18 on the number chart to show how many days we have been in school. Let's count the numbers we have circled on the number chart so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



7. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 18 dots on the five frames. We have been in school 18 days!

Learn (25-30 mins)

Directions

1. TEACHER SAY: We are becoming counting champions! So far we have learned all of our numbers up to 10. Let's play a counting game! We are going to count to 10. We are going to start the game whispering our numbers. As we count up and our numbers get bigger, our voices will get louder. Remember we will start counting at 0 (whispering) and get louder as we get closer to 10. We will do this three times. Are you ready to try it?

STUDENTS DO: Count to 10 with the teacher, starting off whispering and getting louder as they count to 10. Students will play the counting game three times.

2. TEACHER DO: Hand out math journals and direct students to open them to the next blank page.

STUDENTS DO: Take out math journals open them to the next blank page.

TEACHER SAY: Today we are going to test our knowledge of our numbers from 0-10. I am going to think of a mystery number. I am going to give you a clue or a hint about the number. You will use what we've learned about our numbers from 0 to 10 to figure out the mystery number and write it in your journal. We will do the first one together.

I am thinking of a number. This number comes after the number 5 when we count. Write your answer in your math journal..

STUDENTS DO: Write their answers in their math journals.

4. TEACHER SAY: (When students are finished) Whisper your answer into your hand. Raise your hand if you think you know my mystery number.

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student to answer the question.

STUDENTS DO: Selected student shares their answer and explains how they figured it out. (If the student's answer is incorrect, help them figure out the correct answer.)

5. TEACHER SAY: The number 6 comes after 5, so 6 is my mystery number. Let's try another one. I am thinking of a number. This number comes after the number 2. What is my mystery number? Write your answer in your math journal.

STUDENTS DO: Find the mystery number and write it in their math journals.

6. TEACHER SAY: (When students are finished) Whisper your answer into your hand. Raise your hand if you think you know my mystery number.

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student to answer the question.

STUDENTS DO: Selected student shares their answer and explains how they figured it out. (If the student's answer is incorrect, help them figure out the correct answer.)

7. TEACHER SAY: The number 3 comes after 2, so 3 is my mystery number. Let's try another one. I am thinking of a number. This number comes before the number 9. What is my mystery number? Write your answer in your math journal.

STUDENTS DO: Write their answers in their math journals.

TEACHER SAY: (When students are finished) Whisper your answer into your hand. Raise your hand if you think you know my mystery number

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student to answer the question.

STUDENTS DO: Selected student shares their answer and explains how they figured it out. (If the student's answer is incorrect, help them figure out the correct answer.)

8. TEACHER SAY: The number 8 comes before 9, so 8 is my mystery number. Let's do one more. I am thinking of a number. This number comes before the number 5. What is my mystery number?

STUDENTS DO: Write their answers in their math journals.

TEACHER SAY: (When students are finished) Whisper your answer into your hand. Raise your hand if you think you know my mystery number

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student to answer the question.

STUDENTS DO: Selected student shares their answer and explains how they figured it out. (If the student's answer is incorrect, help them figure out the correct answer.)

9. TEACHER SAY: The number 4 comes before 5, so 4 is my mystery number. You all did a wonderful job! Keep your journals out for a few more minutes.

Share (5 mins)

Directions

1. TEACHER SAY: To share today, I first want each of you to choose your favorite number between 1 and 10. On the next blank page in your math journal, write your favorite number and draw a set of objects to match. So, for example, if 5 is your favorite number, you would write the number 5 and draw 5 objects.

STUDENTS DO: Turn to the next blank page. Write favorite number from 1-10 and draw a set of objects to match.

2. TEACHER SAY: Now, I would like for you to share your work with your Shoulder Partner. Tell them what your favorite number is from 1 to 10 and let them count the object in your set. Why is this your favorite number? Share with your partners now.

STUDENTS DO: Discuss drawings from today with their partner.

TEACHER DO: Walk around the room and offer support to students as needed. Give students about 3 minutes to share.

PRIMARY 1

Mathematics

Chapter 3

Lessons 19-24

Overview

Lessons 19-24

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :

- Count objects to tell how many there are
- Count by ones up to 20
- Read and write numerals from 0 up to 20
- Write numbers and represent quantities up to 20
- Understand the relationship between numbers and quantities up to 20
- Understand the concepts of greater than, less than, and equal to up to 20
- Compare two numbers between 1 and 20 presented as written numerals

NUMBERS AND OPERATIONS:

- Compare numbers 0-20, using symbols >, =, and <.
- Greater than, less than, equal to

CH 3 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
19	**Students will:** • Participate in Calendar Math activities • Count, read, and write 11, 12, and 13 • Use the terms greater than, less than, and equal to
20	**Students will:** • Participate in Calendar Math activities • Count, read and write 11, 12, and 13 • Use the terms greater than, less than, and equal to
21	**Students will:** • Participate in Calendar Math activities • Count, read, and write 14 and 15 • Use the terms greater than, less than, and equal to
22	**Students will:** • Participate in Calendar Math activities • Count, read and write 14 and 15 • Use the terms greater than, less than, and equal to
23	**Students will:** • Participate in Calendar Math activities • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using the symbols >, <, and =
24	**Students will:** • Participate in Calendar Math activities • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using the symbols >, <, and =

Lesson 19 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Count, read, and write 11, 12, and 13 • Use the terms greater than, less than, and equal to	• Compare • Greater than • Less than • Equal to

MATERIALS

Calendar Math Area



Math Journal and Pencil



OPTIONAL Video Resources: Comparing Sets

https://tinyurl.com/y8r2bjxg

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is time for Calendar math! Remember the calendar helps us keep track of days, weeks, and months in a year. Whisper into your hands what month we are we in.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Let's say the months of the year together.

STUDENTS DO: Say the names of the months with the teacher.

3. TEACHER SAY: Let's count the months of the year together.

TEACHER DO: Point to the months of the year as you count them.

STUDENTS DO: Count the months of the year aloud as the teacher points.

4. TEACHER DO: Point to the days of the week as you name them.

TEACHER SAY: Let's say the days of the week together.

STUDENTS DO: Say the days of the week aloud as the teacher points.

5. TEACHER SAY: Who remembers why there are numbers on the calendar? What do the numbers mean?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Raise their hands to answer the question.

6. TEACHER SAY: Who can tell us what today's date is?

STUDENTS DO: Raise their hands to volunteer to stand and say the date.

TEACHER DO: If no students are able to say the date, call on a volunteer to say it with you.

TEACHER SAY: Today is (day) the (date) of (month) (year). Let's all say it together!

STUDENTS DO: Repeat the date.

7. TEACHER SAY: How many days have we been in school? Let's find out! Who can come up and put today's stick in the pocket (bag/box/cup)?

TEACHER DO: Call on a student to place the straw in the pocket.

STUDENT DO: Selected student will take 1 counting stick and place it in the Ones pocket as they count 1.

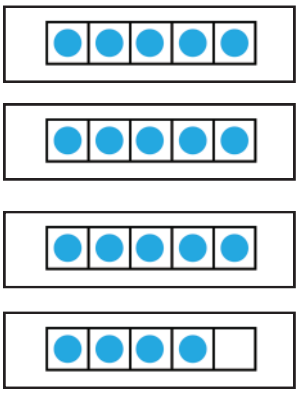
8. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 8 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 9. I'm going to count them. (Count the straws.) Now we have 19 straws. We have been in school 19 days!

Who can come up and circle 19 on the number chart?

STUDENTS DO: Selected student will circle 19 on the number chart.

TEACHER DO: ______ drew a circle around the number 19 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



9. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 19 dots on the five frames. We have been in school 19 days!

Learn (25-30 mins)

Directions

1. TEACHER SAY: Over the past few weeks we have been learning about our numbers from 1 to 10. Today we will be learning about the numbers 11,12, and 13! We are going to practice counting to 13, and writing the numbers 11, 12, and 13. We are also going to compare numbers.

First, we are going to play a game called Jump Up! We will clap and say each number counting all the way up to 11. When we get to 11 we will jump up and say 11! Remember to only jump up when we get to the number 11.

TEACHER DO: Play the game to 11. Repeat the game counting up to 12. Repeat the game counting up to 13.

STUDENTS DO: Play the game along with the teacher, counting first to 11, then 12, then 13. In between rounds, students will sit and wait for directions.



3. TEACHER SAY: Great job! Let's keep practicing. Yesterday we learned that we can use both of our hands to show the number 10. Let's count to 10 on our fingers.

STUDENTS DO: Hold up 10 fingers and count aloud with the teacher.

4. TEACHER DO: Show two completed five frames.

TEACHER SAY: We also found out that 10 dots fill up two five frames. Help me count as I fill up our five frames with 10 dots.

STUDENTS DO: Count aloud as the teacher draws 10 dots on the five frames.

5. TEACHER SAY: Today the first number we will learn is 11. Do we have any more open spots on our five frame? I don't see any either! What would we need to do to make 11?

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: We would need to add another five frame to help us show the number 11! Let's add another five frame.

6.TEACHER DO: Display a blank five fram

TEACHER SAY: Right now we have 10 dots. How many more dots do we need to add to our five frame to show 11? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands

7. TEACHER DO: Use **Calling Sticks** to select a student to share their answer. Draw one more dot in the empty five frame.

TEACHER SAY: One! That's correct! Let's count all of our dots together again.

TEACHER DO: Point to the dots on the five frames.

STUDENTS DO: Count the dots in the 5 frames.

8. TEACHER DO: Write the number 11 on the board.

TEACHER SAY: We have 11 dots. What do you notice about this number?

TEACHER DO: Using **Calling Sticks**, select student to share answer.

STUDENTS DO: Raise their hands to share an answer.

9. TEACHER SAY: The number 11 has two numbers, or digits. A one and another one. Let's practice writing the number 11 in the air.

STUDENTS DO: Write the number 11 in the air with the teacher.

10. TEACHER DO: Distribute the math journals and pencils.

TEACHER SAY: Turn to the next blank page in your math journal. Draw 11 balloons. What shape did we talk about that is like a balloon? A circle!

STUDENTS DO: Draw 11 balloons.

TEACHER DO: Model drawing one or two balloons for the students, then walk around the room to offer support to students as needed.

11. TEACHER SAY: Now we're going to practice writing the number 11 in our math journals. Write the number 11 inside your last balloon.

STUDENTS DO: Write the number 11 in their math journals inside their last balloon.

TEACHER DO: Model for the students. Write the number 11 on the board, then walk around the room to offer support to students as needed.

12. TEACHER SAY: Right now we have eleven balloons. But one of my friends gave me her balloon. Let's add one more balloon to the balloons in our journals.

STUDENTS DO: Draw one more balloon in their journal.

TEACHER DO: Draw one more balloon on the board.

TEACHER SAY: How many balloons do we have now? Does anyone know what number is one more than 11? Let's count them together.

TEACHER DO: Count the balloons on the board as the students count the balloons in their journals.

STUDENTS DO: Count aloud the balloons in their journals.

13. TEACHER SAY: The number that comes after 11 is 12. Now we have 12 balloons!

TEACHER DO: Write the number 12 on the board.

TEACHER SAY: What do you notice about the number 12? The number 12 is also a two-digit number. We write it with a one and then a two. Let's practice writing 12 in the air. Then we will write the number 12 in our journals inside the balloon you just drew.

STUDENTS DO: Write the number 12 in the air along with the teacher and then write it in the math journal inside the last balloon they drew.

14. TEACHER SAY: You all are wonderful number writers! Guess what? Another one of my friends gave me his balloon! What should we do? Share your idea with your Shoulder Partner.

STUDENTS DO: Discuss the question with their shoulder partners.

TEACHER DO: Using **Calling Sticks**, select students to share answers from their partners.

TEACHER SAY: Great idea! We need to draw one more balloon. Let's do that now.

STUDENTS DO: Draw one more balloon on the board while the students draw one more balloon in their journal.

15. TEACHER SAY: We had 12 balloons and then we drew one more. What number comes after 12? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

TEACHER SAY: Who whispered 13 into their hands? You are right! The number that comes after 12 is 13! Let's count our balloons together.

TEACHER DO: Point to the balloons on the board.

STUDENTS DO: Count aloud all of the balloons they have drawn in their math journals. .

16. TEACHER SAY: What do you notice about the number 13? The number 13 is also a two-digit number. We write it with a one and then a three. Let's practice writing 13 in the air. Then we will write the number 13 in our journals inside the balloon you just drew.

STUDENTS DO: Write the number 13 in the air along with the teacher and then write it in the math journal inside the last balloon they drew.

TEACHER SAY: What did we have to do every time we added one more number?

STUDENTS DO: Raise their hands to answer the question.

TEACHER SAY: Each time we go up one number, we add one more to the total number we have to draw. We had to add one more balloon! The higher we count, the bigger the number.

TEACHER SAY: Tomorrow, we will practice counting from 1 to 13 again and will begin to compare numbers. *Compare* means to see how things are the same and different.

Share (5 mins)

Directions

1. TEACHER SAY: How does your drawing change each time you learn about a new number? In other words, how is your drawing of 5 items different from your drawing of 6 items or 7 items? Talk about your thinking with your Shoulder Partner.

STUDENTS DO: Discuss their thinking with their shoulder partners.

2. TEACHER DO: After students have time to discuss with their shoulder partner, use **Calling Sticks** to select students to share answers from their partners. Students should note that they have to draw more and more items as they learn about new numbers. They may also say that their drawings get bigger or it takes longer.

Lesson 20 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Count, read and write 11, 12, and 13 • Use the terms greater than, less than, and equal to	• Compare • Greater than • Less than • Equal to

MATERIALS

Calendar Math Area



Math Journal and Pencil



OPTIONAL Video Resources:
Comparing Numbers 0-9

https://tinyurl.com/y7cvgax7

Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Calendar! Calendar! Calendar! Remember the calendar helps us keep track of days, weeks, and months in a year. Whisper into your hands the month we are in right now.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Let's say the months of the year together. I will say the first one, then point to you to say the next one. Let's go back and forth.

STUDENTS DO: Say the names of the months, alternating with the teacher.

3. TEACHER SAY: Let's count the months of the year together.

TEACHER DO: Point to the months of the year as you count them.

4. STUDENTS DO: Count the months of the year as the teacher points to them.

TEACHER DO: Point to the days of the week as you name them.

TEACHER SAY: Let's say the days of the week together, alternating like we did for the months.

STUDENTS DO: Say the names of the days of the week, alternating with the teacher: (Alternating) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

5. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Can you say the date, too?

STUDENTS DO: Repeat the date.

7. TEACHER SAY: How many days have we been in school? Let's find out! Who can come up and put today's stick in the pocket (bag/box/cup)?

TEACHER DO: Call on a student to place the straw in the pocket.

STUDENT DO: Selected student will take 1 counting stick and place it in the Ones pocket as they count 1.

8. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 10 straws in the Tens pocket and 9 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 10. I'm going to count them. (Count the straws.) Now we have 20 straws. We have been in school 20 days!

Wait! We have 10 straws in the Ones pocket. Who remembers the rules for the pockets? We can only fit up to 9 straws in the pockets and when we get to 10, we have to bundle them together and move them to the next pocket. Who would like to come up and do that?

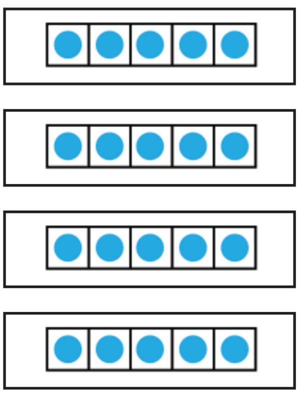
STUDENTS DO: Raise hands to volunteer. Selected student bundles the 10 straws and places them in the Tens pocket

9. TEACHER SAY: Who can come up and circle 20 on the number chart?

STUDENTS DO: Selected student will circle 20 on the number chart.

TEACHER DO: ______ drew a circle around the number 20 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number charts. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



6. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame to show how many days we have been in school. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 20 dots on the five frames. We have been in school 20 days! What do you notice about our five frames? What will we have to do tomorrow?

STUDENTS DO: Count the number of dots together. Students should notice that they now have four complete five frames. They will have to add a new five frame tomorrow in order to continue their daily count.

Learn (25-30 mins)

Directions

1. TEACHER DO: Pass out math journals to students.

TEACHER SAY: Yesterday was a busy day in math. Let's take out our math journals and review what we learned yesterday. Open to the pages we wrote on yesterday. Talk with your Shoulder Partner about what you learned. Then I will ask you to share it with the whole class.

STUDENTS DO: Open their math journals to the pages they wrote yesterday (about 11, 12, and 13). Talk to their shoulder partners about the numbers 11, 12, and 13.

2. TEACHER DO: Using **Calling Sticks**, select a few students to share their answer.

STUDENTS DO: Discuss what they learned yesterday about 11, 12, and 13.

3. TEACHER SAY: Great job! We learned about three numbers – 11, 12, and 13. Open your math journal to the next clean page.

STUDENTS DO: Open their math journals to the next clean page.

4. TEACHER SAY: Draw 11 dots on your journal page. Count carefully and keep them near each other. Check your Shoulder Partner's work.

STUDENTS DO: Draw 11 dots in their journals. Check their shoulder partners' work.

5. TEACHER SAY: Draw a big circle around the 11 dots you drew. Write the number 11 next to it.

STUDENTS DO: Draw a big circle around the 11 dots and label it 11.

TEACHER DO: Review how to write 11 as needed and have students help each other, if necessary.

6. TEACHER SAY: Now, on the same page draw 12 dots. Count carefully and keep them near each other. When you're done, check your Shoulder Partner's work.

7. STUDENTS DO: Draw 12 dots in their journals. Check their shoulder partners' work.

TEACHER SAY: Draw a big circle around the 12 dots you drew. Write the number 12 next to it.

STUDENTS DO: Draw a big circle around the 12 dots and label it 12.

TEACHER DO: Review how to write 12 as needed and have students help each other, if necessary.

8. TEACHER SAY: On the same page, draw 13 dots. Count carefully and keep them near each other. When you're done, check your Shoulder Partner's work.

STUDENTS DO: Draw 13 dots in their journals. Check their shoulder partners' work.

9. TEACHER SAY: Draw a big circle around the 13 dots you drew. Write the number 13 next to it.

STUDENTS DO: Draw a big circle around the 13 dots they drew and label it 13.

TEACHER DO: Review how to write 13 as needed and have students help each other, if necessary.

10. TEACHER SAY: You have a set of 11, a set of 12, and a set of 13 on your paper. Let's compare the numbers 11, 12, and 13. *Compare* means to see how things are the same and different. When we compare numbers, we can talk about number or set of objects is bigger or *greater than* another number or set. We can also compare them to see which number is small or *less than*. Sometimes the amounts are the same and we can say they are *equal*.

TEACHER DO: Write the words greater than, less than, and equal to on the chalkboard/whiteboard or somewhere all students can see.

11. TEACHER SAY: I'm going to read these words. You repeat them after me.

TEACHER DO: Read the words aloud. Pause to allow students to repeat them after you.

STUDENT DO: Repeat the words greater than, less than, and equal to after the teacher.

12. TEACHER SAY: Let's compare 11 and 13. Look at your drawings in your math journal. If you need to count your dots again, go ahead. Which number is bigger/has the most dots?

STUDENTS DO: Count the dots and determine which number has the most dots.

13. TEACHER SAY: Which number is bigger/has the most dots? Right, 13 has the most dots! We can say 13 is greater than 11. We can also say that 11 is less than 13. Now you say it with me.

STUDENTS DO: Say along with the teacher: "13 is greater than 11. 11 is less than 13."

14. TEACHER SAY: Let's compare more numbers together!

TEACHER DO: Call a number of students to the front of the room (Choose any number.) Divide students into two unequal groups.

STUDENTS DO: Selected students go to the front of the room and stand in groups as directed.

15. TEACHER SAY: How many are in this group? (Students answer.) How many are in this group? (Students answer.) Which group has more? (Students answer.) We can say ______ is greater than ______. We can also say that ______ is less than ______. I'm going to say it again and you repeat after me.

STUDENTS DO: Repeat after the teacher: ______ is greater than ______. ______ is less than ______.

16. TEACHER DO: Call an even number of students to the front of the room. Divide them into two equal groups.

TEACHER SAY: How many students are in the first group? How many students are in the second group? They're the same number! Is one group greater than the other group? Is one group less than the other group? No! We can say that ______ is equal to ______. I'm going to say it again and you repeat after me.

STUDENTS DO: Repeat after the teacher: ______ is equal to ______.

17. TEACHER SAY: Let's compare some more numbers and practicing using our new vocabulary words: greater than, less than, and equal to.

TEACHER DO: Call more students to the front of the room and divide them into unequal or equal groups. Ask students to count each group and decide which is greater than and which is less than – or equal to.

STUDENTS DO: Count classmates and compare the numbers of students in each group. Practice using their new vocabulary words.

18. TEACHER SAY: You did such a great job comparing numbers today! We're going to learn some new numbers tomorrow and practice comparing again. Does anyone have any questions?

STUDENTS DO: Ask questions to help build understanding or clarify misconceptions.

Share (5 mins)

Directions

1. **TEACHER SAY: We are going to share what we did today with our Shoulder Partners. Take turns telling your partner one thing you learned during math today.**

STUDENTS DO: Explain to their partners what they learned in math today.

Lesson 21 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Count, read, and write 14 and 15 • Use the terms greater than, less than, and equal to	• Compare • Greater than • Less than • Equal to

MATERIALS

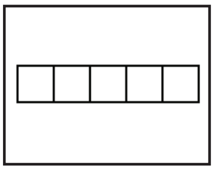
Calendar Math Area



Math Journal and Pencil



Five Five Frames (total)



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Let's start Calendar Math! Remember the calendar helps us keep track of days, weeks, and months in a year. What month are we in right now?

STUDENTS DO: Answer in unison.

2. TEACHER SAY: Let's say the months of the year together, going back and forth like yesterday. This time, you start. What is the first month in the year?

STUDENTS DO: (Alternating) January, February, March, April, May, June, July, August, September, October, November, December.

3. TEACHER DO: Point to the days of the week as you name them.

TEACHER SAY: Let's say the days of the week together, going back and forth. You start. What is the first day of the week?

STUDENTS DO: Say the days of the week aloud.

4. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: **Today is (day) the (date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

5. TEACHER SAY: **How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

6. TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 0 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there is 1. I'm going to count them. (Count the straws.) Now we have 21 straws. How many days have we been in school?**

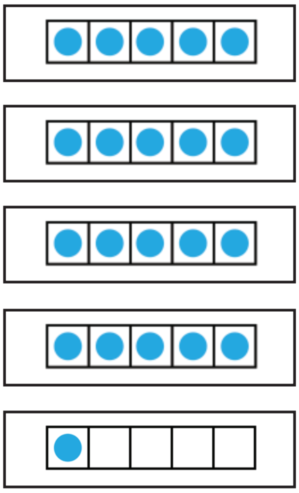
STUDENTS DO: Answer the question – 21.

1. TEACHER SAY: **Who can come up and circle 21 on the number chart?**

STUDENTS DO: Selected student will circle 21 on the number chart.

TEACHER DO: ______ drew a circle around the number 21 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



7. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: **I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: **There are 21 dots on the five frames. We have been in school 21 days!**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Does anyone remember the greatest or largest number we have studied so far?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Yes! 13. What number do you think we will be learning about today?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

2. TEACHER SAY: **We are learning about two numbers today, 14 and 15! We are going to play a new counting game today called Balance Challenge. Everyone is going to stand up and balance on one foot as we count up to our numbers of the day.**

STUDENTS DO: Play the game. Stand up and balance on one foot while counting to 14. Repeat the game counting up to 15. At the end of the game, students sit.

TEACHER SAY: **That was fun! Let's keep practicing.**

3. TEACHER DO: Distribute the math journals and pencils.

TEACHER SAY: **I was walking to school today and I found a beautiful garden. I started counting the flowers and I counted 14. Watch as I draw 14 flowers on the board and count to 14.**

TEACHER DO: Draw 14 flowers on the board as you count aloud.

4. TEACHER SAY: **Now you turn to the next open page in your journal and draw 14 flowers. (You may come up with a different story if you'd like, using the number 14). When you are finished, ask your Shoulder Partner to check your work.**

STUDENTS DO: Draw 14 flowers in their math journals. Student partners check each other's work.

5. TEACHER SAY: **The number 14 has two digits. We write it with a 1 and a 4. Let's write 14 in the air with our fingers. Then we will write it in our journals next to our 14 flowers.**

STUDENTS DO: Write the number 14 in the air, then write the number 14 in their math journals next to their flowers.

6. TEACHER SAY: **But then you'll never believe what happened! One more flower bloomed or opened up before my eyes! Now there were 15 flowers. Watch as I draw 15 flowers on the board and count to 15.**

TEACHER DO: Draw 15 flowers on the board as you count aloud.

7. TEACHER SAY: **Underneath the 14 flowers you drew, draw a set of 15 flowers. When you are finished, ask your Shoulder Partner to check your work.**

STUDENTS DO: Draw 15 flowers in their math journals. Student partners check each other's work.

8. TEACHER SAY: **The number 15 has two digits. We write it with a 1 and a 5. Let's write 15 in the air with our fingers. Then we will write it in our journals next to our 15 flowers.**

STUDENTS DO: Write the number 15 in the air, then write the number 15 in their math journals next to the 15 flowers they drew.

9. TEACHER SAY: **Let's count to 14 and 15 a different way. I will start counting and if I point to you, you say the next number. So if I say 1 and point to ______, ______ will say 2. What will the next student say? Right, 3! The rest of us will whisper count into our hands.**

STUDENTS DO: Listen as the teacher gives directions and asks questions to help them understand, if necessary.

10. TEACHER DO: Starting with yourself, say, "1." Point to a student. That student should say, "2." Continue counting to 14, pointing to a different student for each number.

STUDENTS DO: Whisper count into their hands to 14, unless the teacher points at them. Selected students say aloud the next number in the count to 14.

11. TEACHER SAY: **Let's do the same thing as we count to 15.**

STUDENTS DO: Whisper count into their hands to 15, unless the teacher points at them.

Selected students say aloud the next number in the count to 15.

12. TEACHER SAY: **As we did yesterday, let's compare the numbers we learned about today. Remember, compare means to see how things are the same and different. We can compare numbers to see which number is greater than and which is less than. Sometimes, the quantities will be the same and we can say they are equal to each other.**

Let's look at the numbers we learned today: 14 and 15. Look at the sets of flowers you drew in your journal. Which number is greater? Which is less? How do you know?

TEACHER DO: Using **Calling Sticks**, select students to share answers. Encourage students to use the terms greater than and less than.

13. TEACHER SAY: **Right, 15 is greater than 14. 14 is less than 15.**

14. TEACHER DO: If time allows, repeat the activity from yesterday's lesson in which students compare groups of students standing at the front of the room using the terms greater than, less than, and equal to.

STUDENTS DO: Compare groups of classmates, using the terms greater than, less than, and equal to.

Share (5 mins)

Directions

1. TEACHER SAY: **We are going to share some of our new knowledge with our Shoulder Partners now. One partner will share how to write the number 14. The other partner will share how to write the number 15.**

STUDENTS DO: Discuss their learning with their partners.

TEACHER DO: Walk around and listen in on their directions to their shoulder partners. Using **Calling Sticks**, select students to share their partners' answers.

Lesson 22 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count, read and write numbers up to 15
- Use the terms greater than, less than, and equal to

KEY VOCABULARY

- Compare
- Greater than
- Less than
- Equal to

LESSON PREPARATION FOR THE TEACHER

In this lesson, students will work in small groups to compare two numbers that you give to them on number cards. Prepare 2-3 sets of number cards from 0-15 for small group work (See the materials list for an example). (You will need to create enough numbers cards for each student group to receive two cards at a time.) Once students have played one round of the game, collect the cards and shuffle them and redistribute them to students. To create the cards, use a marker to write a large number on a sheet of paper. Draw dots on the paper to represent the number displayed on the card.

MATERIALS

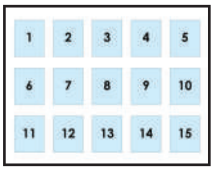
Calendar Math Area



Math Journal and Pencil



Sets of numbers from 0-15, written on paper/cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Let's start Calendar Math. Who can come up and tell everyone what month we are in right now?

STUDENTS DO: Raise their hands to volunteer. Selected student tells the class what month it is.

2. TEACHER SAY: Let's say the months of the year together, alternating between sides of the room. When I point to your side of the room, say the next month as a group.

STUDENTS DO: Alternate saying the months of the year aloud.

3. TEACHER DO: Point to the days of the week as you name them.

TEACHER SAY: Who can come up and lead us in saying and counting the days of the week together?

STUDENTS DO: Raise their hands to volunteer. Selected student leads the class in saying the days of the week aloud, then counting the days of the week. Seated students say the days of the week and count them aloud as directed.

4. TEACHER SAY: The last number we counted tells us how many days there are in a week. How many days are there in a week?

STUDENTS DO: Call out the answer together.

5. TEACHER SAY: Who would like to come up and tell everyone today's date?

STUDENTS DO: Raise their hands to volunteer. The selected student will say today's date.

TEACHER DO: Repeat the date.

2. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

3. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 1 straw in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 2. I'm going to count them. (Count the straws.) Now we have 22 straws. How many days have we been in school?

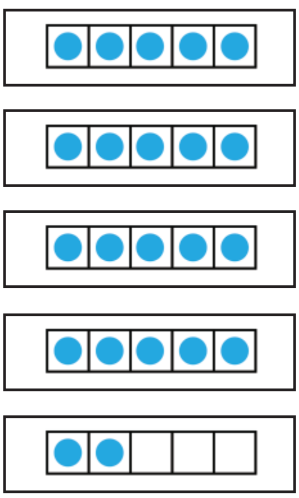
STUDENTS DO: Answer the question – 22.

4. TEACHER SAY: Who can come up and circle 22 on the number chart?

STUDENTS DO: Selected student will circle 22 on the number chart.

TEACHER DO: ______ drew a circle around the number 22 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



8. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

TEACHER SAY: There are 22 dots on our five frames and we have been in school for 22 days!

Learn (25-30 mins)

Directions

1. TEACHER DO: Pass out math journals to students.

TEACHER SAY: Yesterday we learned some new things in math. Who can tell me one thing we talked about?

TEACHER DO: Using **Calling Sticks**, select a few students to share their answer.

TEACHER SAY: Great! We learned about several numbers. The first was the number 14. Remember 14 has two digits, a 1 and a 4. Watch me write 14 on the board.

TEACHER DO: Write the number 14 on the board.

2. TEACHER SAY: The next number we studied was 15. 15 also has two digits, a 1 and a 5. Watch me write 15 on the board.

TEACHER DO: Write the number 15 on the board.

3. TEACHER SAY: Just like yesterday, we're going to play the Balance Challenge! We will stand up and balance on one leg while we count to 14.

STUDENT DO: Play the game balancing on one leg and counting up to 14 and then repeat to 15. At the end of each game students sit down.

4. TEACHER SAY: At the end of yesterday's lesson, we talked about comparing numbers. Today you are going to work with your classmates to practice comparing numbers again. You are going to use the terms greater than, less than, and equal to as you talk about your comparisons.

TEACHER DO: Divide students into small groups of 4-6 students (Larger classes will need to be divided into larger groups. Smaller classes can work in smaller groups.) Explain the directions for the activity.

5. TEACHER SAY: I am going to give each group two number cards. Your job is to compare the two numbers and determine which number is greater and which number is less – or if they are equal!

For example, if I give your group a 10 and a 2, you will decide which is greater (10) and which is less (2). Then you will practice saying, "Ten is greater than two. Two is less than ten."

When I call on your group, one person in your group will stand up and say what you all decided. Do you have any questions?

STUDENTS DO: Raise their hands to ask questions.

6. TEACHER DO: Distribute two number cards to each small group. Allow time for students to compare the numbers and practice saying their "greater than/less than" statements. Once students are ready, call on each group to report out. Help them with their comparisons as needed. Celebrate each group's work with applause or waving hands.

Repeat the activity 1-2 more times (as class time allows). Collect and store all number cards for later use.

Share (5 mins)

Directions

1. **TEACHER SAY:** **Who can raise their hand and tell the class what we did in class today and how the activity helped you understand greater than, less than, and equal to a little better.**

TEACHER DO: Use **Calling Sticks** to select two students to share their answers.

STUDENTS DO: Selected students share their learning about comparing numbers.

Lesson 23 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using less than < and equal to = symbols	• Compare • Greater than • Less than • Equal to	Create symbol cards showing the greater than, less than, and equal to symbols: > < = . The cards should be about the same size as the number cards you used in the previous lesson. You will use the number cards again in this lesson.

MATERIALS

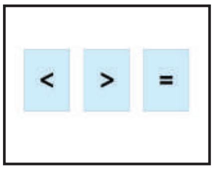
Calendar Math Area



Math Journal and Pencil



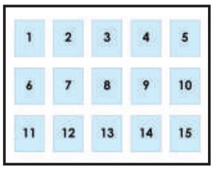
Greater than, Less than, and Equal to symbols (See Lesson Preparation for the Teacher for instructions.)



Tape



Sets of numbers from 0-15, written on paper/cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: What month are we in right now? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Let's say the months of the year together.

STUDENTS DO: Say the months of the year along with the teacher.

3. TEACHER SAY: Let's count the months of the year together.

TEACHER DO: Point to the months of the year as you count them.

STUDENTS DO: Count the months of the year as the teacher points.

4. TEACHER DO: Point to the days of the week.

TEACHER SAY: Let's say the days of the week together. Who would like to come up and read the days of the week to the class?

STUDENTS DO: Selected student reads aloud the days of the week with the teacher's help (as needed).

7. TEACHER SAY: Who can tell us what today's date is?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Raise their hand to volunteer. The selected student will say today's date.

TEACHER SAY: Great! Can everyone repeat today's date? Today is (day) the (date) of (month) (year).

STUDENTS DO: Repeat today's date.

5. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

6. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 2 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 3. I'm going to count them. (Count the straws.) Now we have 23 straws. How many days have we been in school?

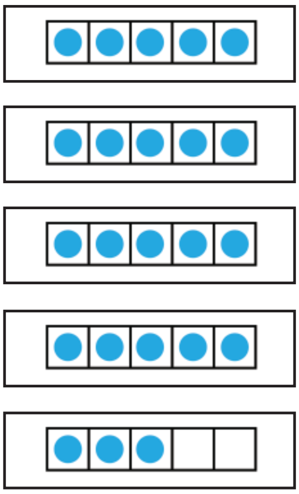
STUDENTS DO: Answer the question – 23.

7. TEACHER SAY: Who can come up and circle 23 on the number chart?

STUDENTS DO: Selected student will circle 23 on the number chart.

TEACHER DO: ______ drew a circle around the number 23 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



9. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 23 dots on the five frames. We have been in school 23 days!

Learn (25-30 mins)

Directions

1. TEACHER SAY: So far this year we have learned all of our numbers from 0 to 15. Let's practice counting to 15.

We will play a game called Jump Up. We will squat down and count to 15. When we get to 15 we will jump up and shout 15.

STUDENTS DO: Play game. Repeat the game 3 times.

TEACHER SAY: Wow! You all are counting champions!

2. TEACHER SAY: Now we are going to compare some of the numbers we've learned, but we're going to learn some very important math symbols to help us do it! Watch as I write these sentences on the board.

TEACHER DO: Write the following sentences on the board:
- 15 is greater than 10.
- 4 is less than 8.
- 12 is equal to 12.

3. TEACHER SAY: It took so long to write those sentences. But, I know some math symbols that can make it easier. Instead of writing "is greater than," I can use this symbol.

TEACHER DO: Display the greater than symbol. Erase the words "is greater than" and replace it with the greater than symbol. Read the math sentence aloud again, pointing at each part of the sentence as you say it.

4. TEACHER SAY: 15 is greater than 10. Notice that the bigger part of the symbol – it almost looks like a wide open mouth! – is pointing toward the greater number. The smaller part of the symbol is pointing toward the smaller number. Let's look at the next math sentence.

This says, "4 is less than 8." I know another math symbol that can make it easier to write that sentence. Instead of writing "is less than," I can use this symbol.

5. TEACHER DO: Display the less than symbol. Erase the words "is less than" and replace it with the less than symbol. Read the math sentence aloud again, pointing at each part of the sentence as you say it.

6. TEACHER SAY: 4 is less than 8. Notice that the smaller part of the symbol – it almost looks like a pointy little nose! – is pointing toward the smaller number. The larger part of the symbol is pointing toward the larger number. Let's look at the next math sentence.

This says, "12 is equal to 12." I know one more math symbol that can make it easier to write that sentence. Instead of writing "is equal to," I can use this symbol.

TEACHER DO: Display the equal sign. Erase the words "is equal to" and replace it with the equal sign. Read the math sentence aloud again, pointing at each part of the sentence as you say it.

7. TEACHER SAY: 12 is equal to 12. Notice that the two numbers are the same and these two lines are the same. Let's practice using these symbols together.

TEACHER DO: Call five students to the front of the room. Give two of the students a number card and have them stand next to each other. Give one symbol card to each of the other three students. Have all five students stand so everyone in the class can see.

8. TEACHER SAY: Compare these two numbers. Think about which number is greater and which number is less. Which symbol should we put between these two numbers?

STUDENTS DO: Compare the numbers and raise their hands to select a symbol. Selected

student identifies which student/symbol should move to stand between the other two students to create the correct math sentence.

9. TEACHER SAY: Let's read this math sentence together to see if it is correct. (First number) is ______ ______ (second number).

TEACHER DO: If the sentence is incorrect, help students fix it by moving the correct symbol into place.

TEACHER DO: Repeat the game as many times as possible in the remaining Learn time. Call five different students up each time.

STUDENTS DO: Participate in the game, offering answers and holding numbers and symbol cards.

Share (5 mins)

Directions

1. TEACHER SAY: Let's get out our math journals. Turn to the next blank page.

STUDENTS DO: Take out math journal and turn to the next blank page.

TEACHER SAY: Write one of the number sentences we talked about today in your math journal. Share your work with your **Shoulder Partner** and check to make sure you both are correct.

STUDENTS DO: Share math journal work with their shoulder partners, correcting their work as needed.

Lesson 24 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Count from 0-15 • Use the terms greater than, less than, and equal to • Compare numbers using the symbols >, <, and =	• Compare • Greater than • Less than • Equal to

MATERIALS

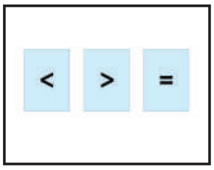
Calendar Math Area



Math Journal and Pencil



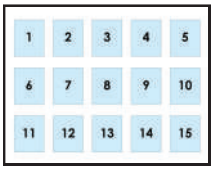
Greater than, Less than, and Equal to symbols (from previous lesson)



Tape



Sets of numbers from 0-15, written on paper/cards (from previous lesson)



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It's time for Calendar! Remember the calendar helps us keep track of days, weeks, and months in a year. What month are we in right now? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Let's say the months of the year together.

3. STUDENTS DO: Say the months of the year along with the teacher.

4. TEACHER DO: Point to the days of the week.

TEACHER SAY: Who would like to come up and say the days of the week?

STUDENTS DO: Raise their hands to volunteer. Selected student says the days of the week aloud. Seated students say the names aloud with their colleague.

7. TEACHER SAY: Who can tell us what today's date is?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Raise their hand to volunteer. The selected student will say today's date.

TEACHER SAY: Great! Can everyone repeat today's date? Today is (day) the (date) of (month) (year).

STUDENTS DO: Repeat today's date.

8. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

9. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 3 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 4. I'm going to count them. (Count the straws.) Now we have 24 straws. How many days have we been in school?

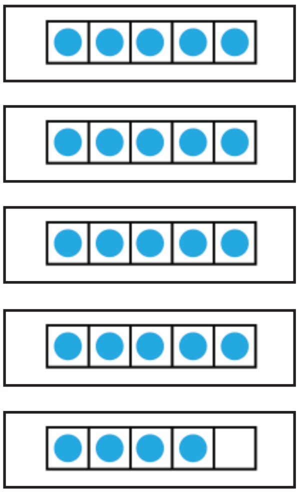
STUDENTS DO: Answer the question – 24.

10. TEACHER SAY: Who can come up and circle 24 on the number chart?

STUDENTS DO: Selected student will circle 24 on the number chart.

TEACHER DO: _______ drew a circle around the number 24 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



10. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 24 dots on the five frames. We have been in school 24 days!

Learn (25-30 mins)

Directions

1. TEACHER DO: Display the greater than, less than, and equal to symbols where all students can see them. Review the less than and equal to symbols with students.

TEACHER SAY: Let's review the symbols we learned yesterday. Who remembers what this one means? (Point to the greater than symbol.)

STUDENTS DO: Raise their hands to answer the question.

TEACHER SAY: This symbol means greater than. The big open mouth always points at the bigger number.

2. TEACHER DO: Repeat for less than and equal to symbols.

TEACHER SAY: Let's practice writing the symbols in the air.

STUDENTS DO: Practice writing the three symbols in the air.

3. TEACHER SAY: Today you are going to work with a partner (or small group) to practice comparing numbers and using the new symbols. After each problem, we'll check our work together.

I'm going to put two number cards on the board. You and your partner (or group mates) figure out which symbol should go between the two numbers. I will call on someone to put a symbol between the two numbers. Do you have any questions?

STUDENTS DO: Raise their hands to ask questions, if necessary.

4. TEACHER DO: Divide students into pairs (or small groups). Begin the activity by displaying two number cards on the board (or somewhere all students can see them).

TEACHER SAY: Compare these two numbers. Talk to your partner (or group mates), and figure out which number is greater and which one is less – and which symbol should go in between these two numbers.

STUDENTS DO: Talk about the two numbers and decide which is greater and which is less. Discuss which symbol to place between the two numbers.

5. TEACHER SAY: Who thinks they know which symbol should go between the two numbers up here?

STUDENTS DO: Raise their hands to volunteer. Selected student(s) go to the front of the classroom and select the symbol they want to place between the two numbers.

6. TEACHER DO: Tape the symbol between the two numbers. Ask the rest of the class if they think the answer is correct. If the answer is correct, offer praise. If the answer is incorrect, help students understand why and help them correct the sentence.

TEACHER DO: Repeat the process several times to give as many students as possible a chance to come to the board.

Share (5 mins)

Directions

1. TEACHER DO: Distribute math journals.

2. TEACHER SAY: Work with your Shoulder Partner to write three number sentences in your math journals. One sentence should use the greater than symbol (>). One sentence should use the less than symbol (<). One sentence should use the equal to symbol (=).

STUDENTS DO: Work with their shoulder partners to write number sentences.

TEACHER DO: Walk around room and check journals. Make note of any students who may need additional support on comparing numbers and using symbols.

PRIMARY 1

Mathematics

Chapter 4

Lessons 25-30

Overview

Lessons 25-30

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :

- Count objects to tell how many there are
- Count by ones to 20
- Read and write numerals from 0 to 20
- Understand the relationship between numbers and quantities up to 20
- Write numbers and represent quantities up to 20

NUMBERS AND OPERATIONS:

- Organize data with up to three categories into bar or picture graphs
- Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another

CH 4 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
25	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 16 and 17
26	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 16 and 17 • Use objects to count numbers and find 10 more
27	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Organize data into a picture graph
28	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 18 • Answer questions about data in a class picture graph
29	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 19 and 20 • Create visual representations of 19 and 20
30	**Students will:** • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count up to 20 • Answer questions about data in a class bar graph

Lesson 25 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 16 and 17	• Today • Yesterday • Tomorrow

MATERIALS

Calendar Math Area



Math Journal and Pencil



Calendar (15-20 mins)

Directions

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It is Calendar Time! The calendar helps us keep track of days, weeks, and months in a year. What month are we in right now?

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Let's say the months of the year together, but this time let's go back and forth between you and me. I'll start. "January." Then you say…

STUDENTS DO: Say the names of the months, (Alternating, teacher in bold) January, February, March, April, May, June, July, August, September, October, November, December.

3. TEACHER SAY: Who remembers how many months are in a year?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student to answer the question.

TEACHER SAY: There are 12 months in the year! Let's count them together.

TEACHER DO: Point to the months of the year as you count them with the students.

STUDENTS DO: Count aloud the months of the year.

4. TEACHER SAY: Let's say the days of the week together.

TEACHER DO: Point to the days of the week.

STUDENTS DO: Say the names of the days of the week as the teacher points.

5. **TEACHER DO:** Write the word today on the board where everyone can see it.

TEACHER SAY: This word says today. Today is the present day – the day we are in right now. Who can come up and tells us what day it is today?

STUDENTS DO: Raise their hands to volunteer. The selected student will say today's day with the help of the teacher, as needed.

TEACHER SAY: Great job! Today is _____________. Everyone repeat the date with me. "Today is _____________."

STUDENTS DO: Say Today is _____________.

6. **TEACHER DO:** Write the word tomorrow where all students can see it.

TEACHER SAY: Does anyone know what tomorrow means? Tomorrow is the day the comes right after today. If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

STUDENTS DO: Whisper their answers into their hands.

7. **TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is tomorrow.

8. **TEACHER DO:** Write the word yesterday where all students can see it.

TEACHER SAY: Does anyone know what yesterday means? Yesterday is the day the came right before today. If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday is.

STUDENTS DO: Whisper their answers into their hands.

9. **TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday was?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day was yesterday.

TEACHER SAY: From now on when we do Calendar Math together, we will talk about today, tomorrow, and yesterday. Who would like to say the date today?

TEACHER DO: Call on a student with a raised hand and help them say the date (as needed).

TEACHER SAY: Great job! Today is (day) the (date) of (month) (year). Let's say it together.

STUDENTS DO: Repeat the date.

11. **TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

12. **TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 4 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 5. I'm going to count them. (Count the straws.) Now we have 25 straws. How many days have we been in school?**

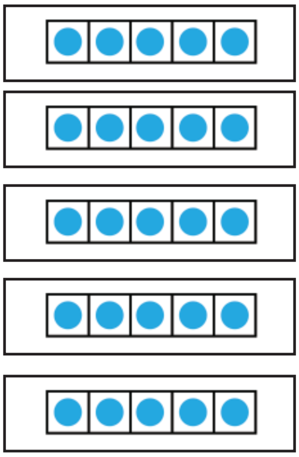
STUDENTS DO: Answer the question – 25.

13. TEACHER SAY: Who can come up and circle 25 on the number chart?

STUDENTS DO: Selected student will circle 15 on the number chart.

TEACHER DO: _______ drew a circle around the number 25 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



5. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 25 dots on the five frames. We have been in school 25 days! What do you notice about our five frames? What will we have to do the next time we count school days?

STUDENTS DO: Raise their hands to answer the teacher's question.

TEACHER SAY: Right! We will need to add another five frame tomorrow!

Learn (25-30 mins)

Directions

1. TEACHER SAY: So far this year we have been counting and learning new numbers. We have created sets of numbers using objects and compared numbers using greater than, less than, and equal to. Can anyone tell me what the biggest number is that we have practiced?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: That's right, 15. Remember 15 is a two-digit number. We write it with a 1 and a 5.

2. TEACHER SAY: Today we are going to work on the next two numbers. Does anyone want to guess what those numbers are?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: The next two numbers we are learning about are 16 and 17. Let's start with 16.

3. TEACHER DO: Write the numeral 16 on the board.

TEACHER SAY: What do you notice about the number 16? Turn and tell your Shoulder Partner what you notice!

STUDENTS DO: Turn to their shoulder partner and discuss what they notice about 16. (Students should mention that it has two digits, the number 1 and the number 6).

TEACHER DO: Using **Calling Sticks**, select a student to share their partner's answer.

4. TEACHER SAY: The number 16 is another two-digit number. We write the number 16 with a 1 and then a 6. I'm going to draw 16 triangles on the chalkboard/whiteboard. Watch as I draw and count. If you want to count with me, you may!

TEACHER DO: Draw 16 triangles on the chalkboard/whiteboard (or overhead projector) as you count aloud from 1 to 16.

STUDENTS DO: Observe and count along if they're ready.

5. **TEACHER SAY: Let's play the game Jump Up. We will squat down and count together to 16. When we get to 16 we will jump up and shout 16. We will play two times.**

STUDENTS DO: Play the game along with the teacher.

6. **TEACHER SAY: Let's practice writing 16 in the air.**

STUDENTS DO: Practice writing 16 in the air with the teacher.

7. **TEACHER DO:** Distribute crayons and math journals to students.

TEACHER SAY: Open your math journals to the next clean page.

STUDENTS DO: Open their math journals.

8. **TEACHER SAY: Select your favorite color crayon. If someone else is using it, choose a different crayon. Let's write the number 16 together.**

TEACHER DO: Model again how to write the number 16.

STUDENTS DO: Write 16 in their math journals.

9. **TEACHER SAY: Now, draw 16 triangles in your math journal. I will draw them again and count aloud. Follow along with me if you need to. In my last triangle, I'm going to write the number 16. You do that, too.**

TEACHER DO: Model again how to draw 16 triangles, counting aloud to 16. In the last triangle, write the number 16.

10. **TEACHER SAY: Great job! Let's learn our next number: 17.**

TEACHER DO: Write the numeral 17 on the board.

TEACHER SAY: What do you notice about the number 17? Turn and tell your Shoulder Partner what you notice!

STUDENTS DO: Turn to their shoulder partners and discuss what they notice about 17. (Students should mention that it has two digits, the number 1 and the number 7).

TEACHER DO: Using **Calling Sticks**, select a student to share their partners' answer.

11. **TEACHER SAY: The number 17 is another two-digit number. We write the number 17 with a 1 and then a 7. I'm going to draw 17 triangles on the chalkboard/whiteboard. Watch as I draw and count. If you want to whisper count into your hands, you may!**

TEACHER DO: Draw 17 triangles on the chalkboard/whiteboard (or overhead projector) as you count from 1 to 17.

STUDENTS DO: Observe and whisper count along if they're ready.

12. **TEACHER SAY: Let's play the Balance Challenge game as we count to 17. Everyone is going to stand up and balance on one foot as we count.**

STUDENTS DO: Play the game along with the teacher.

13. **TEACHER SAY: Let's practice writing 17 in the air.**

STUDENTS DO: Practice writing 17 in the air with the teacher.

14. TEACHER SAY: Open your math journals to the next clean page.

STUDENTS DO: Turn to the next clean page in their math journals.

15. TEACHER SAY: Select a new crayon of a different color. Let's write the number 17 together.

TEACHER DO: Model again how to write the number 17.

STUDENTS DO: Select a new crayon and write 17 in their math journals.

16. TEACHER SAY: Now, draw 17 triangles in your math journal. I will draw them again and count aloud. Follow along with me if you need to. In my last triangle, I'm going to write the number 17. You do that, too.

TEACHER DO: Model again how to draw 17 triangles, counting aloud to 17. In the last triangle, write the number 17.

Share (5 mins)

Directions

1. TEACHER SAY: Today I would like you to share with your Shoulder Partner something interesting you are discovering about numbers as we learn new numbers and count and draw every day. I'd like to hear what you're thinking about. Take turns listening to each other's ideas.

STUDENTS DO: Discuss the question with partners.

TEACHER DO: Have students raise hands to volunteer to share their thinking. Take note of any misconceptions or evidence of high-level thinking.

Lesson 26 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 16 and 17 • Use objects to count numbers and find 10 more	• Today • Yesterday • Tomorrow • 10 more	• Gather sets of 20 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area



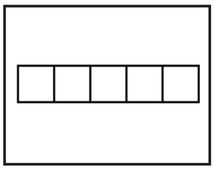
Sets of 20 counters (one set per pair of students)



Math Journal and Pencil



Six Five Frames (total)



Calendar (15-20 mins)

Directions

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Calendar Time! What month are we in right now? Whisper the answer into your hand.**

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: **Let's say the months of the year together, but this time let's go back and forth between you and me. I'll start. "January." Then you say…**

STUDENTS DO: Say the months of the year, alternating with the teacher. (Alternating, teacher in bold) January, February, March, April, May, June, July, August, September, October, November, December.

3. TEACHER SAY: **Now say the days of the week when I point to them.**

STUDENTS DO: Say the days of the week as the teacher points.

4. TEACHER DO: Write the word today on the chalkboard/whiteboard (or somewhere students can see it). Point to the word.

TEACHER SAY: **This word says today. Who can remember what today means?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If necessary, explain that today means the present day, or the day we are in right now.

5. TEACHER SAY: **Who knows what today is?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students do not know, tell them. If students do know, repeat after them.

6. TEACHER S AY: **Today is __________. Say it with me. Today is ___________.**

STUDENTS DO: Say today's day with the teacher.

7. TEACHER DO: Write the word tomorrow where all students can see it.

TEACHER SAY: **Does anyone remember what tomorrow means? Tomorrow is the day the comes right after today. If today is _______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.**

STUDENTS DO: Whisper their answers into their hands.

8. TEACHER SAY: **Who can now raise their hand and tell the class what day they think tomorrow is?**

STUDENTS DO: Raise their hands to answer the question.

9. TEACHER DO: Write the word yesterday where all students can see it.

TEACHER SAY: **Does anyone remember what yesterday means? Yesterday is the day the came right before today. If today is _______, what day was yesterday? Whisper into your hand what day you think yesterday was.**

STUDENTS DO: Whisper their answers into their hands.

10. TEACHER SAY: **Who can now raise their hand and tell the class what day they think yesterday is?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is yesterday.

TEACHER SAY: **From now on when we do Calendar Math together, we will talk about today, tomorrow, and yesterday.**

11. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Who would like to say the date today?**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Help the volunteer say today's date. Ask students to repeat the date.

STUDENTS DO: Repeat the date.

12. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

13. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 5 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 6. I'm going to count them. (Count the straws.) Now we have 26 straws. How many days have we been in school?

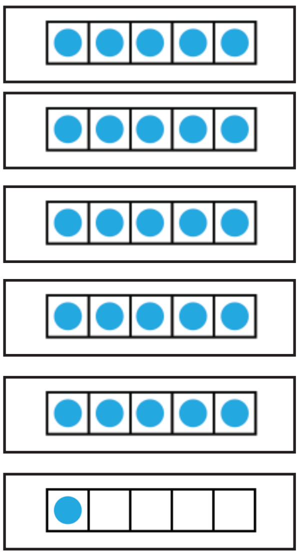
STUDENTS DO: Answer the question – 26.

14. TEACHER SAY: Who can come up and circle 26on the number chart?

STUDENTS DO: Selected student will circle 26 on the number chart.

TEACHER DO: ______ drew a circle around the number 26 on the number chart to show how many days we have been in school. Let us count together using our number chart the days we have circled so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



15. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: We filled up our five frames and have to add a new one today! I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 26 dots on the five frames. We have been in school 26 days!

Learn (25-30 mins)

Directions

1. TEACHER SAY: Who is ready to practice some counting? We are becoming expert counters! Let's practice counting up to our new numbers that we learned yesterday! Can anyone remember what numbers we learned about yesterday?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: That's right, 16 and 17. Turn to your Shoulder Partner and tell them what you remember about the numbers 16 and 17. Be sure you take turns sharing!

STUDENTS DO: Talk to their shoulder partners about the numbers 16 and 17 (Students should mention things like they are two-digit numbers. 16 is ten more than 6, 17 is ten more than 7, etc.)

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

2. TEACHER SAY: That's wonderful! Now, let's practice counting objects up to 17. We are going to work with our Shoulder Partners again. I am going to hand out a bag of 20 ____ (objects of your choice) to each set of partners. Then, I will call out one of our numbers. I want you to work with your partner to count out that many items. Take turns. If one partner counts them out, the other partner can count them again to be sure they are correct.

3. TEACHER DO: Hand out bags of objects to each pair of students. (Students may work in groups of 3 if needed).

TEACHER SAY: The first number I want you to count out is 7.

STUDENTS DO: Count out 7 objects.

TEACHER DO: Walk around the room to offer support as needed.

4. TEACHER SAY: Be sure your partner checks your work! How many ____ (items) do you have? (7) Great! Now, I want you to count out ten more. So, you already have seven, count out ten more and put them in the group.

STUDENTS DO: Count out 10 more objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Now, how many objects do you have now total?

STUDENTS DO: Respond to the teacher's question – 17.

5. TEACHER SAY: Great! You had 7. Then you added ten more. Now you have 17! Remember yesterday we learned that 7 and 10 more is 17! Let's try another one! Go ahead and put all of your _____ (items) in one pile.

This time, I want you to count out 16 items. Be sure your partner checks your work!

STUDENTS DO: Students count out 16 objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: How many objects do you have?

STUDENTS DO: Respond to the teacher's question – 16.

6. TEACHER SAY: Now, from the 16 objects on your table, count 6 and set them aside in a new group. Count the objects left in the other group. How many do you have?

STUDENTS DO: Respond to the teacher's question – 10.

TEACHER SAY: You have 6 objects in one group, and now you know that 16 is 10 more than six! Wonderful! I knew you were expert counters! Let's try another one.

7. TEACHER SAY: Count out 14 items. Be sure you check each other's work.

STUDENTS DO: Count out 14 objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Now, from the 14 objects on your table, count 4 and set them aside in a new group. Count the objects left in the other group. How many do you have?

STUDENTS DO: Respond to the teacher's question – 10.

TEACHER SAY: You have 4 objects in one group, and now you know that 14 is 10 more than 4. Let's try one more.

8. TEACHER SAY: Count out 11 items. Be sure you check each other's work.

STUDENTS DO: Count out 11 objects.

TEACHER DO: Walk around the room to offer support as needed.

TEACHER SAY: Now, from the 11 objects on your table, count 1 and set it aside in a new group. Count the objects left in the other group. How many do you have?

STUDENTS DO: Respond to the teacher's question – 10.

TEACHER SAY: You have 1 object in one group, and now you know that 11 is 10 more than 1.

9. TEACHER SAY: We'll do more of this again another day. Put all of your counting objects away and prepare for Share time.

STUDENTS DO: Put away the counting objects.

Share (5 mins)

Directions

1. TEACHER DO: Write the following on the chalkboard/whiteboard:
1 – 11
4 – 14
6 – 16
7 – 17

2. TEACHER SAY: What did you notice about our work with numbers today? What did you notice about 1 and 11, 4 and 14, 6 and 16, and 7 and 17? Talk to your Shoulder Partner and share your thinking.

STUDENTS DO: Talk to their shoulder partners.

TEACHER DO: Call on students to share their thinking with the class. If possible, ask questions to help guide students' thinking about how the larger numbers were 10 more than the smaller numbers

Lesson 27 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Identify the days of the week that are today, tomorrow, and yesterday
- Organize data into a picture graph

KEY VOCABULARY

- Today
- Yesterday
- Tomorrow
- Picture graph
- Data

LESSON PREPARATION FOR THE TEACHER

In this lesson, students will vote on their favorite animal. You will record their responses in the form of a simple drawing (pictures) to create a picture graph. On large chart paper (or on the overhead projector so all students can see), create a blank graph to prepare for the activity. (Note for the Teacher: Feel free to change this picture graph to a topic you prefer with four student choices you prefer.)

Favorite Animal																
Dog																
Cat																
Bird																
Fish																

MATERIALS

Calendar Math Area



Picture graph Chart (See Lesson Preparation for the Teacher for instructions)

Math Journal and Pencil



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It's Calendar Time! The calendar helps us keep track of days, weeks, and months in a year. Who knows what month we are in right now? Whisper your answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Today, I would like to hear you say the months of the year aloud. If you get stuck, I will help you! Say the months as I point to them.

STUDENTS DO: Say the months of the year as the teacher points.

3. TEACHER SAY: **I'd like to hear all of you say the days of the week! You say them as I point to them.**

STUDENTS DO: Say the days of the week aloud as the teacher points.

4. TEACHER SAY: **Who can remember what today means?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand.

3. TEACHER SAY: **Who knows what today is?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students do not know, tell them. If students do know, repeat after them.

4. TEACHER SAY: **Today is __________. Say it with me. Today is ___________.**

STUDENTS DO: Say today's day with the teacher.

5. TEACHER SAY: **Does anyone remember what tomorrow means? Tomorrow is the day the comes right after today. If today is _______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.**

STUDENTS DO: Whisper their answers into their hands.

6. TEACHER SAY: **Who can now raise their hand and tell the class what day they think tomorrow is?**

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is tomorrow.

7. TEACHER SAY: **Does anyone remember what yesterday means? Yesterday is the day the came right before today. If today is _______, what day was yesterday? Whisper into your hand what day you think yesterday was.**

STUDENTS DO: Whisper their answers into their hands.

8. TEACHER SAY: **Who can now raise their hand and tell the class what day they think yesterday was?**

STUDENTS DO: Raise their hands to answer the question.

9. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Who can tell the class what today's date is?**

STUDENTS DO: Selected student will come up and say the date (with the help of the teacher, if needed).

TEACHER SAY: **Let's all say the date together. Today is (day) the (date) of (month) (year).**

STUDENTS DO: Say the date with the teacher.

10. TEACHER SAY: **How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.**

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

11. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 6 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 6. I'm going to count them. (Count the straws.) Now we have 27 straws. How many days have we been in school?

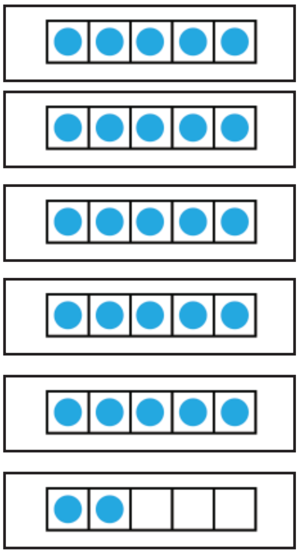
STUDENTS DO: Answer the question – 27.

12. TEACHER SAY: Who can come up and circle 27 on the number chart?

STUDENTS DO: Selected student will circle 27 on the number chart.

TEACHER DO:______ drew a circle around the number 27 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



7. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 27 dots on the five frames. We have been in school 27 days! What do you notice about our five frames? What will we have to do the next time we count school days?

Learn (25-30 mins)

Directions

1. TEACHER DO: Display the blank picture graph chart you created before the lesson.

2. TEACHER SAY: Let's try something new now! I'm going to say a word and I want you to say it back to me. Ready? Picture graph.

STUDENTS DO: Say picture graph.

TEACHER SAY: Does anyone know what a picture graph is?

TEACHER DO: Allow a few students to answer if they would like.

3. TEACHER SAY: A *picture graph* is a graph, or a chart, that uses different pictures to show information. You can create a picture graph for a lot of things. It helps us organize information or data so we can read and understand it easier.

Today, we are going to create a class picture graph. Our picture graph is going to be on our favorite animal. You have 4 choices to choose from: dog, cat, bird, or fish. You may only choose one animal, so choose carefully!

4. TEACHER DO: Ask each student to choose his or her favorite animal. When the students

choose, draw a picture of the animal in the box. These should be quick, simple sketches. (When you're finished you should have the same number of animals drawn as students in your class; for example, 50 animals for 50 students.)

STUDENTS DO: Choose their favorite animal from a dog, a cat, a bird, or a fish.

5. TEACHER SAY: Wow! Look at our class picture graph! Remember that each picture on our graph represents one students' choice. Help me count how many students chose the dog as their favorite animal.

TEACHER DO: Point to the dogs on the picture graph and count aloud with the students.

STUDENTS DO: Count the dogs on the picture graph.

6. TEACHER SAY: Help me count how many students chose the cat as their favorite animal.

TEACHER DO: Point to the cats on the picture graph and count aloud with the students

STUDENTS DO: Count the cats on the picture graph.

7. TEACHER SAY: Help me count how many students chose the bird as their favorite animal.

TEACHER DO: Point to the birds on the picture graph and count aloud with the students.

STUDENTS DO: Count the birds on the picture graph.

8. TEACHER SAY: Now, help me count how many students chose the fish as their favorite animal.

TEACHER DO: Point to the fish on the picture graph and count aloud with the students.

STUDENTS DO: Count the fish on the picture graph.

9. TEACHER SAY: Great job! That was fun creating a class picture graph! We will talk about our picture graph again tomorrow.

TEACHER DO: Keep the picture graph on the board. You will revisit it with students again tomorrow.

Share (5 mins)

Directions

1. TEACHER SAY: Why do you think this kind of graph is called a picture graph? Talk about your ideas with your Shoulder Partner. Take turns listening to each other's ideas.

STUDENTS DO: Share their thinking with their shoulder partners.

TEACHER DO: Using **Calling Sticks**, select a student to share their thinking.

Lesson 28 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 18 • Answer questions about data in a class picture graph	• Today • Tomorrow • Yesterday • Picture graph	• Display the picture graph you created with the students in the previous lesson

MATERIALS

Calendar Math Area



Favorite Animal picture graph from the previous lesson

Math Journal and Pencil



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: It's Calendar Time! Who can tell us how the calendar helps us?

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. Who knows what month we are in right now? Whisper your answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: Today, I would like to hear you say the months of the year aloud. If you get stuck, I will help you! Say the months as I point to them.

STUDENTS DO: Say the months of the year as the teacher points.

3. TEACHER SAY: I'd like to hear all of you say the days of the week! You say them as I point to them.

STUDENTS DO: Say the days of the week aloud as the teacher points.

4. TEACHER SAY: Who can remember what today means?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand.

7. TEACHER SAY: Who knows what today is?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students do not know, tell them. If students do know, repeat after them.

8. TEACHER SAY: Today is _________. Say it with me. Today is __________.

STUDENTS DO: Say today's day with the teacher.

9. TEACHER SAY: Does anyone remember what tomorrow means? Tomorrow is the day the comes right after today. If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

STUDENTS DO: Whisper their answers into their hands.

10. TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is tomorrow.

8. TEACHER SAY: Does anyone remember what yesterday means? Yesterday is the day the came right before today. If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday was.

STUDENTS DO: Whisper their answers into their hands.

10. TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday was?

STUDENTS DO: Raise their hands to answer the question.

11. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Who can tell the class what today's date is?

STUDENTS DO: Selected student will come up and say the date (with the help of the teacher, if needed).

TEACHER SAY: Let's all say the date together. Today is (day) the (date) of (month) (year).

STUDENTS DO: Say the date with the teacher.

4. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

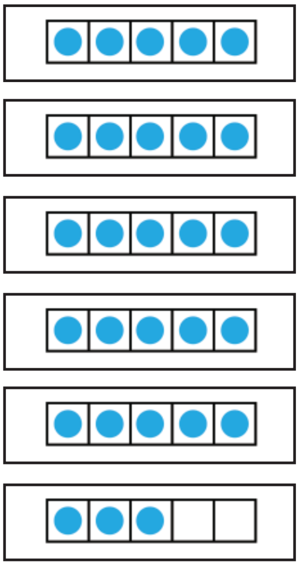
5. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 7 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 8. I'm going to count them. (Count the straws.) Now we have 28 straws. How many days have we been in school?

STUDENTS DO: Answer the question – 28.

6. TEACHER SAY: **Who can come up and circle 28 on the number chart?**

STUDENTS DO: Selected student will circle 28 on the number chart.

TEACHER DO: ______ drew a circle around the number 28 on the number chart to show how many days we have been in school. Let us count together using our number chart the days we have circled so far. Say the numbers you know and listen to me say the numbers you don't know.



STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.

8. TEACHER DO: Draw one dot on the five frame.

TEACHER SAY: **I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: **There are 28 dots on the five frames. We have been in school 28 days! What do you notice about our five frames? What will we have to do the next time we count school days?**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Now we're going to talk about something else we did yesterday. We made a class graph. Does anyone remember what we call the type of graph we made?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Yes! You're right. It's called a picture graph. Let's say that word together.**

STUDENTS DO: Say picture graph.

2. TEACHER SAY: **Remember, a picture graph is a graph or chart that uses pictures to show data, or information. Yesterday we made a class picture graph on our favorite animals. Let's look back at the picture graph we made.**

TEACHER DO: Display the completed picture graph so that all students can see.

3. TEACHER SAY: **Who can remind us what each picture on our picture graph stands for?**

4. TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Explain each picture is one student's vote or favorite animal.

4. TEACHER SAY: **That's right! Each picture on our picture graph stands for one of our colleague's votes for his or her favorite animal. How did we find out yesterday how many students chose a dog as their favorite animal?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Answer the question.

5. TEACHER SAY: You're right! When we counted all of the dogs on the chart, we found out how many people in this class chose dogs as their favorite animal! We did the same thing for cats, birds, and fish.

6. TEACHER DO: Distribute students' math journals and ask them to open them to the next clean page.

STUDENTS DO: Take out math journals and open to the next blank page.

7. TEACHER SAY: Now that we are on the next blank page, let's answer some questions about our picture graph. I will ask a question and I want you to write your answer in your math journal. You may have to write a number or you may have to draw one of our animals to answer. Does anyone have any questions?

STUDENTS DO: Raise their hands if they have questions.

8. TEACHER SAY: Look at our class picture graph. In your math journal, draw a picture of the animal that got the most votes. (If there was a tie, adjust the question to say animals.)

STUDENTS DO: Draw a picture of the animal that got the most votes.

TEACHER SAY: Who would like to share their answer with the class?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Confirm the student's answer or correct their thinking by counting the votes for the most popular animal.

9. TEACHER SAY: In your math journal, draw a picture of the animal that got the least votes.

STUDENTS DO: Draw a picture of the animal that got the least votes.

TEACHER SAY: Who would like to share their answer with the class?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Confirm the student's answer or correct their thinking by counting the votes for the least popular animal.

10. TEACHER SAY: Last question for today: Draw pictures of the two animals that received less than ______ votes. (Choose a number that works for the class picture graph. Choose more than or equal to, if you prefer.)

STUDENTS DO: Draw pictures of the two animals that received less than ______ votes

11. TEACHER SAY: You did a great job answering questions about our class picture graph. Now let's talk about some new numbers! Keep your math journals. We will write on the next clean page.

12. TEACHER SAY: A couple days ago we learned numbers 16 and 17. Can anyone guess what number we might learn next?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: That's right! The number we are learning about today is 18.

13. TEACHER SAY: I am going to draw and count 18 circles on the chalkboard/whiteboard (or overhead projector). Count along with me.

TEACHER DO: Draw 18 circles on the board as you count aloud.

STUDENTS DO: Watch the teacher draw 18 circles and count aloud along with the teacher.

14. TEACHER SAY: Let's play the Jump Up game. We will squat down and count to 18. When we get to 18, we will jump up and shout, "18!"

STUDENTS DO: Play the game Jump Up with the teacher.

15. TEACHER SAY: Now, draw 18 circles in your math journal. Check your Shoulder Partner's work and let them check yours.

STUDENTS DO: Draw 18 circles in their math journals. Shoulder partners check each other's work.

16. TEACHER SAY: Let's practice writing the number 18 together. First we will write it in the air, then we will write it in our math journals. The number 18 is another two-digit number. We write the number 18 with a 1 and then an 8.

STUDENTS DO: Write the number 18 in the air, then write it in their math journals.

Share (5 mins)

Directions

1. TEACHER SAY: If you could add an animal to our class picture graph, what would it be? How many people do you think would vote for it? Draw a picture of it in your math journal. Then write down how many people you think would vote for it. Share your work with your Shoulder Partner.

STUDENTS DO: Draw a picture in their math journal of the animal they would like to add to the class picture graph. Write down how many people they think would vote for it. Share their work with their shoulder partner.

TEACHER DO: Using **Calling Sticks**, select students to share their ideas.

Lesson 29 Overview

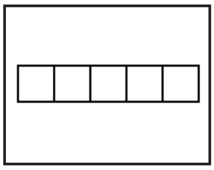
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Identify the days of the week that are today, tomorrow, and yesterday • Count, read, and write 19 and 20 • Create visual representations of 19 and 20	• Today • Yesterday • Tomorrow • Picture graph	• Create or print four five frames for the Learn segment of the lesson

MATERIALS

Calendar Math Area



Four Five Frames (for Learn)



Math Journal and Pencil



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Let's start Calendar Time! Who can tell us how the calendar helps us?

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. Who knows what month we are in right now? Whisper your answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

2. TEACHER SAY: I would like to hear you say the months of the year aloud. If you get stuck, I will help you! Say the months as I point to them.

STUDENTS DO: Say the months of the year as the teacher points.

3. TEACHER SAY: Now I'd like to hear all of you say the days of the week! You say them as I point to them.

STUDENTS DO: Say the days of the week aloud as the teacher points.

5. TEACHER SAY: Who knows what today is?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students do not know, tell them. If students do know, repeat after them.

6. TEACHER SAY: Today is _________. Say it with me. Today is __________.

STUDENTS DO: Say today's day with the teacher.

7. TEACHER SAY: If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

STUDENTS DO: Whisper their answers into their hands.

8. TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is tomorrow.

9. TEACHER SAY: If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday was.

STUDENTS DO: Whisper their answers into their hands.

10. TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday was?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is yesterday.

11. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Who can tell the class what today's date is?

STUDENTS DO: Selected student will come up and say the date (with the help of the teacher, if needed).

TEACHER SAY: Let's all say the date together. Today is (day) the (date) of (month) (year).

STUDENTS DO: Say the date with the teacher.

7. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

8. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 8 straws in the Ones pocket. We added another straw to the Ones pocket today, so now there are 9. I'm going to count them. (Count the straws.) Now we have 29 straws. How many days have we been in school?

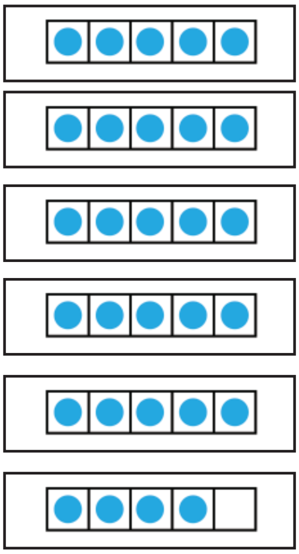
STUDENTS DO: Answer the question – 29.

9. TEACHER SAY: Who can come up and circle 29 on the number chart?

STUDENTS DO: Selected student will circle 29 on the number chart.

TEACHER DO:______ drew a circle around the number 29 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



9. TEACHER DO: Draw one dot on the five frame.

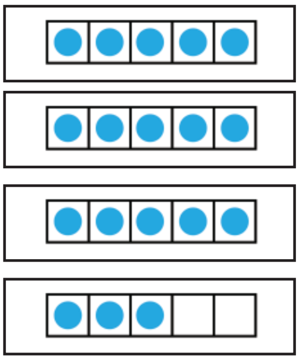
TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 29 dots on the five frames. We have been in school 29 days! What do you notice about our five frames? What will happen the next time we count school days?

Learn (25-30 mins)

Directions



1. TEACHER DO: Display four five frames so all students can see.

TEACHER SAY: Let's review the last number we learned – 18. I'm going to draw dots in these five frames to make 18. Count along with me.

TEACHER DO: Draw dots in the five frames as you count aloud to 18 with the students.

STUDENTS DO: Count to 18 with the teacher.

2. TEACHER DO: Write the number 18 on the chalkboard/whiteboard or overhead projector.

TEACHER SAY: Eighteen is a two-digit number. We write it with a 1 and an 8. Let's write 18 in the air together.

STUDENTS DO: Write 18 in the air with the teacher.

3. TEACHER SAY: Eighteen has a set of ten (point to the first two five frames) plus eight more (point to the other two five frames). If we start with eight dots and add ten more, we will have 18! That means that 18 is ten more than eight. Who can say what I just said in their own words?

STUDENTS DO: Raise their hands to answer. Selected students will try to explain what the teacher said in their own words.

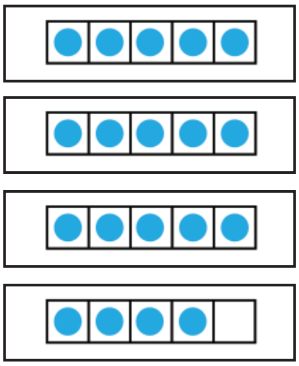
4. TEACHER SAY: I have a question for you. If ten more than 8 is 18, can anyone think of what ten more than 9 is? Turn to Shoulder Partner and tell them your thoughts. (Repeat question as needed.)

STUDENTS DO: Talk to partner about what ten more than 9 may be. (19)

TEACHER DO: Using **Calling Sticks**, select a student to share their partners' answer.

5. TEACHER SAY: Wow! You're right! Ten more than 9 is 19! And guess what? 19 is the next number we are learning. To draw 19 dots, we need to add one more dot to our five frames. We

had 18. Who would like to come up and draw one more dot on our five frames and help us count them?



STUDENTS DO: Raise hands to volunteer. Selected student draws the 19th dot on the five frames and counts with the teacher and class to 19.

6. TEACHER SAY: **Would you like to play the Balance Game or the Jump Up Game?**

STUDENTS DO: Choose which game they would like to play.

TEACHER DO: Play the game the students selected and count to 19. Play 2-3 times.

7. TEACHER DO: Write the number 19 on the chalkboard/whiteboard or overhead projector.

TEACHER SAY: **Like the number 18, 19 is also a two-digit number. We write the number 19 with a 1 and then a 9. Let's practice writing 19 together.**

8. TEACHER DO: Distribute math journals and direct students to open to the next clean page.

STUDENTS DO: Prepare to write in their math journals.

TEACHER SAY: **First, we will write 19 in the air together.**

STUDENTS DO: Write 19 in the air with the teacher.

9. TEACHER SAY: **Now, let's write it in our math journals.**

STUDENTS DO: Write 19 in their math journals.

TEACHER SAY: **On that same page, draw 19 triangles. I will draw 19 triangles on the board. If you need help, draw and count along with me.**

STUDENTS DO: Draw 19 triangles in their math journals.

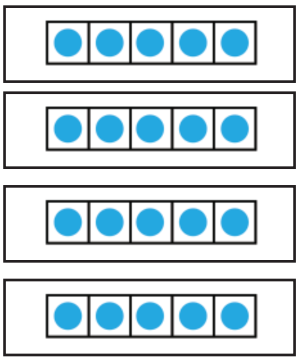
10. TEACHER SAY: **We're going to learn one more number today – a very special number. Does anyone think they know what that number is?**

STUDENTS DO: Students share their thinking with the teacher and class.

TEACHER SAY: **We are going to learn the number 20! Let's take a look at our five frames to see how much 20 is.**

11. TEACHER DO: Direct students' attention back to the four five frames .

TEACHER SAY: **How many dots do we have on our five frames now? Who would like to come up and count them?**



STUDENTS DO: Raise hands to volunteer. Selected student counts 19 dots on the five frames.

12. TEACHER SAY: **To make 20 dots, we need to add one more dot to our five frames. Who would like to draw the 20th dot on our five frames and help us count to 20?**

STUDENTS DO: Raise hands to volunteer. Selected student draws the 20th dot on the five frames and counts with the teacher and class to 20.

13. TEACHER SAY: **Would you like to play the Balance Game or the Jump Up Game?**

STUDENTS DO: Choose which game they would like to play.

TEACHER DO: Play the game the students selected and count to 20. Play 2-3 times.

14. TEACHER SAY: **Great job! Now, let's draw 20 objects in our math journals. Turn to the next**

clean page in your journal and draw 20 of anything you want. Make sure it's something small and simple, because we only have a few minutes to work on our drawings. When you are done, you and your Shoulder Partner should check each other's work.

STUDENTS DO: Open journals and draw 20 objects. When done, shoulder partners check each other's work.

TEACHER DO: Walk around the room to monitor students' work and to offer help where needed.

15. TEACHER SAY: Twenty is a very special number because it looks different from the numbers we have been studying. I'm going to write the number 20 on the board and you tell me how it's different from the other numbers we have learned.

TEACHER DO: Write the number 20 on the board (or where all students can see).

STUDENTS DO: Talk to partner about what they notice about the number 20. (Possible answers are that it has two digits, a 2 and a 0).

TEACHER SAY: Do you notice anything different about this number than the other numbers we've been learning?

TEACHER DO: Using **Calling Sticks**, select a student to share their partners' answer.

STUDENTS DO: Selected student will explain that there is a 2 first instead of a 1.

TEACHER DO: If students are unable to identify how 20 is different, explain the difference.

TEACHER SAY: The number 20 is another two-digit number. We write the number 20 with a 2 and then a 0. We have been writing 1 and another number, but we got all the way up to 1 and 9 – 19 – so for 20 we write a 2 and a 0.

TEACHER DO: Write the number 20 on the chalkboard/whiteboard or overhead projector.

16. TEACHER SAY: Let's practice writing 20 in the air together.

STUDENTS DO: Write 20 in the air with the teacher.

TEACHER SAY: Now, let's write it in our math journals on the same page where you drew your 20 objects. I will write 20 on the board, too, so follow along if you need to.

STUDENTS DO: Turn to the next clean page in their journals and write the number 20.

17. TEACHER SAY: Tomorrow, we will practice counting from 1 to 20 again. This afternoon, see if you can count up to 20 on your way home or in your home!

TEACHER DO: Make sure students keep their math journals for Share.

Share (5 mins)

Directions

(Note to Teacher: In this activity, students are tracing hands with a partner and counting all of their fingers to get to 20. If there are students in your classroom who are missing fingers, work with them to help them count to 20 in a different way. Consider having some of the other students do the activity with them so they are not the only ones doing the different activity.)

1. TEACHER SAY: For Share today, I want you to count with your Shoulder Partner. Open your math journal to the next clean page.

STUDENTS DO: Open math journals.

TEACHER SAY: Place one hand on your math journal and trace it.

STUDENTS DO: Trace one of their hands.

TEACHER SAY: Now place your other hand on your math journal. Ask your Shoulder Partner to trace it. Then you trace your Shoulder Partner's hand. It doesn't matter who goes first.

STUDENTS DO: Trace their shoulder partner's hand.

TEACHER SAY: How many hands do you and your Shoulder Partner have in your journals all together? Count them.

STUDENTS DO: Count their hands and their shoulder partner's hands. Answer the question – 4.

TEACHER SAY: Now, count all of the fingers on those four hands and write down the answer in your math journals. Check each other's work!

STUDENTS DO: Count all of the fingers to find the answer – 20. Record answer in math journal.

TEACHER SAY: Who would like to share the answer with the class?

TEACHER DO: Call on a student with a raised hand.

STUDENTS DO: Raise hand to answer the question. Selected student should say 20. If they are incorrect, call on another student until the correct answer is shared.

TEACHER SAY: You did a great job counting to 20 today!

Lesson 30 Overview

OUTCOMES

Students will:

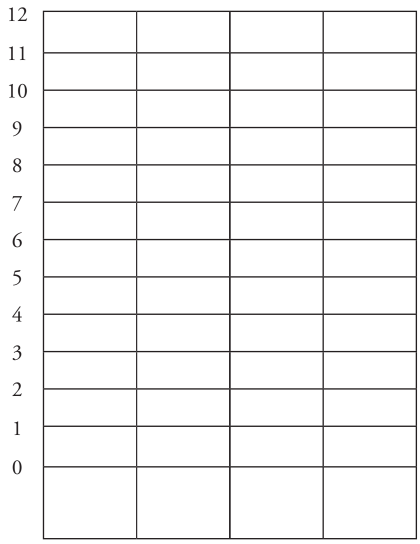
- Participate in Calendar Math activities
- Identify the days of the week that are today, tomorrow, and yesterday
- Count up to 20
- Answer questions about data in a class bar graph

KEY VOCABULARY

- Today
- Yesterday
- Tomorrow
- Picture graph
- Bar graph

LESSON PREPARATION FOR THE TEACHER

In this lesson, you will show students how a bar graph can be used to display data. You will use the data from the Favorite Animals picture graph. Using a large piece of paper, chart paper, or the chalkboard/whiteboard, create a bar graph as shown below. Be sure your bar graph goes up to the largest number of votes on the class picture graph. For example, if dog received the 12 votes and that was the most popular choice, make sure your bar graph goes up to at least 12.



MATERIALS

Calendar Math Area



Math Journal and Pencil



Favorite Animals bar graph (See Lesson Preparation for the Teacher for instructions)

Favorite Animals picture graph from previous lesson

Calendar (15-20 mins)

Directions

1. TEACHER SAY: What month we are in right now? Let's all say it together.

STUDENTS DO: Say the name of the current month aloud together.

2. TEACHER SAY: Say the months as I point to them.

STUDENTS DO: Say the months of the year as the teacher points.

3. TEACHER SAY: Now, say the days of the week as I point to them.

STUDENTS DO: Say the days of the week aloud as the teacher points.

5. TEACHER SAY: Who knows what today is?

TEACHER DO: Call on a student with a raised hand. If students do not know, tell them. If students do know, repeat after them.

6. TEACHER SAY: Today is __________. Say it with me. Today is ___________.

STUDENTS DO: Say today's day with the teacher.

7. TEACHER SAY: If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

STUDENTS DO: Whisper their answers into their hands.

8. TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?

TEACHER DO: Use **Calling Sticks** to call on a student. Make sure all students understand what day is tomorrow.

9. TEACHER SAY: If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday was.

STUDENTS DO: Whisper their answers into their hands.

10. TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday was?

STUDENTS DO: Raise their hands to answer the question.

11. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Who can tell the class what today's date is?

TEACHER DO: Use **Calling Sticks** to call on a student.

STUDENTS DO: Selected student will come up and say the date (with the help of the teacher, if needed).

TEACHER SAY: Let's all say the date together. Today is (day) (number date) of (month).

STUDENTS DO: Say the date with the teacher.

10. TEACHER SAY: How many days have we been in school? Let's find out! I'm going to call a friend up to help me put a counting stick into the Ones pocket.

TEACHER DO: Call one student to help you.

STUDENTS DO: Selected student will add one counting stick to the Ones pocket.

11. TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? There were 20 straws in the Tens pocket and 9 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 10.

Wait! There are 10 straws in the Ones pocket again! What do we have to do? What's the rule? Who can tell us?

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Call on a student with a raised hand.

STUDENTS DO: Selected student explains that the straws have to be bundled and moved to the Tens pocket.

TEACHER SAY: I'm going to count all of the straws now. (Count the straws.) Now we have 30 straws. How many days have we been in school?

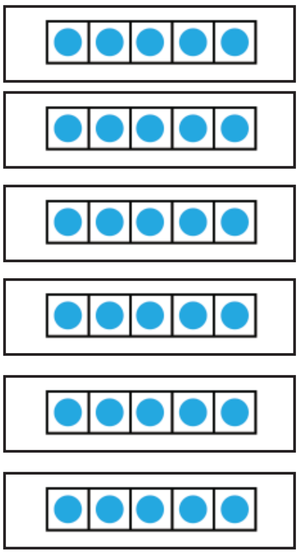
STUDENTS DO: Answer the question – 30.

12. TEACHER SAY: Who can come up and circle 30 on the number chart?

STUDENTS DO: Selected student will circle 30 on the number chart.

TEACHER DO: ______ drew a circle around the number 30 on the number chart to show how many days we have been in school. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the circled numbers with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know.



10. TEACHER DO: Draw one dot on the new five frame.

TEACHER SAY: I am drawing one dot for today in the square on the five frame. How many dots do we have on the five frames now? Let's count them together. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count the dots on the five frames with the teacher. Say the numbers they know and listen to the teacher say the numbers they don't know

TEACHER SAY: There are 30 dots on the five frames. We have been in school 30 days! What do you notice about our five frames? What will we have to do the next time we count school days?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand.

STUDENTS DO: Selected student explains that we will need to add a five frame to the Calendar Math Area.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Let's practice counting up to our new number that we learned yesterday! It was the greatest - or largest - number we have learned so far. Can anyone remember what number that is? Say it together!

STUDENTS DO: Say 20.

TEACHER DO: Write 20 on the chalkboard/whiteboard or somewhere all students can see.

2. TEACHER SAY: That's right, 20. Let's practice counting to 20 together. We're going to play a different game today: Counting Classmates. In this game, I will point to a student. That student will come up and everyone will count, "1!" Then, I will point to another student. That student will join the first student and everyone will count, "2!" What do you think happens next?

STUDENTS DO: Raise hands to answer the question. Selected students explain what they think will happen next.

TEACHER SAY: That's right. I will point to another student and that student will join the others and everyone will count, "3!" We'll do that until we get to 20. Are you ready?

(Note for the Teacher: If you do not have 20 students in your classroom, have each student bring an object to the front of the room when you point to them (for example, books, crayons, or counters you've handed out) until they have collected 20 objects.

3. TEACHER DO: Play the Counting Classmates game with students, pointing to students and counting along with everyone until you reach 20. Then, play the game in reverse, pointing at students and sending them back to their seats until you reach 20 again.

STUDENTS DO: Pay attention to who is being called on and the number they should be counting. Participate in counting and/or joining classmates at the front of the room. Participate in counting as classmates go back to their seats.

4. TEACHER SAY: You did a wonderful job counting all the way to 20! We will keep practicing together as we work on counting, reading, and writing numbers.

Now I'd like to talk about something else we've been learning about – graphs. Today I want to look at our Favorite Animals graph. Who can share something they know about our favorite animals from this graph?

TEACHER DO: Using **Calling Sticks**, select students to answer the question. Help those who need extra support.

STUDENTS DO: Share their thinking about the Favorite Animal graph. Possible answers may include the most or least popular animals, which animals received the same number of votes, and how many students voted for a particular animal.

5. TEACHER SAY: Great work! Did you know there's more than one kind of graph? Today, we are going to take the data from our picture graph and put it on a different kind of graph – a bar graph. Once we create it, you'll see why it's called a bar graph.

6. TEACHER DO: Display the blank bar graph with the pets at the bottom and the numbers along the side.

TEACHER SAY: This is where we will create our new graph today. What do you notice about it?

STUDENTS DO: Raise hands to answer the question. Possible answers may include it has the same animals as the picture graph, it has lines, it has number, it looks a little like the picture graph, but a little different.

7. TEACHER SAY: **Great thinking! We are going to take the data from the picture graph and put it on the bar graph and you are going to help me. Which animal do you think we should start with?**

STUDENTS DO: Select an animal to start with.

TEACHER SAY: **How many students voted for that animal? Help me count the votes on the graph.**

TEACHER DO: If possible, for each animal have a student come up and help by pointing to the pictures as everyone counts.

8. TEACHER SAY: **(Name of animal) received ______ votes. Now we have to put that same data on the bar graph. Look on the side of the bar graph and find that number. Who can come up and point to it?**

STUDENTS DO: Volunteer points to number on the bar graph.

TEACHER SAY: **That's right. I will color in the graph up to that number to show that many people voted for (name of animal).**

TEACHER DO: Color in the bar graph up to the number of votes on the picture graph.

9. TEACHER DO: Repeat the process for the other three animals, asking students to help you count votes, find and point to the numbers on the bar graph, and checking your work. If possible, consider having student volunteers color in the graph for you.

STUDENTS DO: Count votes, find and point to the numbers on the bar graph, and check the teacher's work. May color in the graph.

10. TEACHER DO: Engage students in a discussion about the two graphs.

TEACHER SAY: **How does the bar graph compare to the picture graph? How are they the same? How are they different? Why do you think the bar graph is called a bar graph? If you were going to create a graph, which one would you like to make? Why?**

11. TEACHER DO: Take the picture graph down so students focus on the bar graph.

TEACHER SAY: **Let's take a closer look at our bar graph. I'm going to ask you some questions. You will talk about your thinking with your Shoulder Partner. Then I would like to hear from you.**

12. TEACHER DO: Ask each question one at a time and allow students to answer with their **Shoulder Partner** before moving to the next question.

TEACHER SAY:
- **How many people voted for (name of animal)?**
- **How many people voted for (name of other animal)?**
- **How many more people voted for (name of animal with more votes) than voted for (name of animal with less votes)?**
- **How does the bar graph help you figure that out?**

TEACHER DO: Allow time for students to talk about each answer with their Shoulder Partners. If possible, walk around and listen to their conversations. Take note of any students who understand and can answer the questions.

STUDENTS DO: Work with their shoulder partners to respond to the teacher's questions

13. TEACHER SAY: **I'd like to hear your thinking. Let's talk about each question one at a time.**

STUDENTS DO: Share their answers to each question, explain their thinking and showing others how they got their answers.

TEACHER DO: Talk about each question with students, listening to their answers, checking their thinking, and correcting their misconceptions. Encourage students to show their work and be courageous, even if they are not sure they are right. If necessary, show students how to use the bar graph to count the differences between the votes for the two animals they're talking about.

14. TEACHER SAY: Wow, you did a wonderful job today! You are learning so much about counting and thinking about data on picture graphs and bar graphs. We will continue to work on graphs, so think about any other data you would like to collect.

Share (5 mins)

Directions

1. TEACHER SAY: The other day we created a picture graph of our favorite animals. I asked you to vote for your favorite animal. Then I drew pictures to represent your votes. What graph would you like to make?

Note for the Teacher: It may be helpful to have a list for students to choose from rather than letting them come up with ideas on their own. Possible ideas: Favorite Colors, Favorite School Subject? Number of Brothers? Number of Sisters? Favorite Foods.

STUDENTS DO: Suggest ideas for graphs or choose from the teacher's list.

2. TEACHER DO: Record students' ideas for future graphs.

PRIMARY 1

Mathematics

Chapter 5

Lessons 31-40

Lessons 31-40

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:
- Count objects to tell how many there are
- Count by ones and tens to 100
- Read and write numerals from 0 to 100
- Understand the relationship between numbers and quantities up to 100
- Write numbers and represent quantities with a number to 100
- Apply the Ten-Frame structure as another way to represent quantities in familiar grouping

OPERATIONS AND ALGEBRAIC THINKING:
- Classify objects by their attributes (color, size, and shape)
- Add and subtract within 20 using strategies such as: Counting on
- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false
- Fluently add and subtract within 10
- Use addition and subtraction within 20 to solve word problems with unknowns in all positions

CH 5 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
31	**Students will:** • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 22 • Write numerals 21 and 22 • Add within 10 using pictures and objects
32	**Students will:** • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 24 • Write numerals 23 and 24 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
33	**Students will:** • Participate in Calendar Math activities • Classify objects by color • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 25 • Write the numeral 25 • Add within 10 using pictures and objects
34	**Students will:** • Participate in Calendar Math activities • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 27 • Write the numerals 26 and 27 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
35	**Students will:** • Participate in Calendar Math activities • Classify objects by shape • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 29 • Write the numerals 28 and 29 • Add within 10 using pictures and objects
36	**Students will:** • Participate in Calendar Math activities • Classify objects by shape and color • Count by ones and tens to 30 • Apply the ten-frame structure as a way to represent quantities • Write the numeral 30

LESSON	INSTRUCTIONAL FOCUS
37	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 30 • Read and write numerals from 0-30 • Apply the ten-frame structure as a way to represent quantities • Add within 10 using pictures and objects
38	**Students will:** • Participate in Calendar Math activities • Classify objects by their shape and size • Count by ones and tens to 30 • Read and write numerals from 0-30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
39	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 30 • Represent quantities with a number up to 30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems
40	**Students will:** • Participate in Calendar Math activities • Classify objects by shape, size, and color • Count by ones and tens to 30 • Write numbers 1-30 • Add within 10 using pictures and objects • Use addition within 10 to solve word problems

Lesson 31 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Classify objects by color
- Count from 1 to 22
- Read and write numerals from 0-22
- Apply the ten-frame structure as a way to represent quantities
- Add within 10 using manipulatives

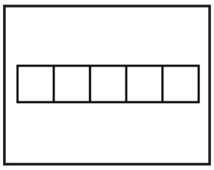
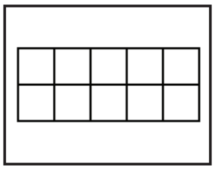
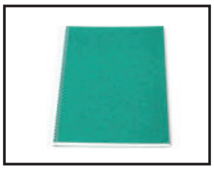
KEY VOCABULARY

- Addition (Add)
- Classify
- Equals (=)
- Plus (+)
- Symbols
- Ten frame

LESSON PREPARATION FOR THE TEACHER

- Create or print 1 five frame and 6 ten frames for Learn segment.
- Gather 6-9 objects for students to sort by color. For example: 3 red crayons, 2 green crayons, and 4 blue crayons or 2 red circles, 4 yellow triangles, and 2 blue squares (all the same size)
- Gather sets of 10 objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes. Place in cup or bag.

MATERIALS

Calendar Area		Five Frame	
6-9 objects for students to sort by color		Sets of 10 counters (one set per pair of students)	
Six Ten Frames		Math Journal	

Calendar (15-20 mins)

Directions

1. TEACHER SAY: We are going to do Calendar time a little different today. I am going to call a student up to help me teach Calendar time.

TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

Note for the Teacher: If it works better for you and your class, you may choose a different student to help with the different parts of Calendar time or you can choose one student each day to help the with all of Calendar. Be sure to choose different students each day.

2. TEACHER SAY: **How many months are in a year?**

STUDENTS DO: Respond to question together: There are 12 months in a year.

3. TEACHER SAY: **______ is going to lead us in saying the months of the year.**

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

STUDENTS DO: Say the months of the year along with the Calendar Helper.

TEACHER SAY: **I have a question for my Calendar Helper. What month is it?**

STUDENTS SAY: Calendar Helper responds: The month is ______.

4. TEACHER SAY: **Now I would like for ______ to lead us in saying the days of the week together.**

STUDENTS DO: Say the days of the week with the Calendar Helper.

5. TEACHER SAY: **I have a question for my Calendar Helper. What day of the week is it?**

STUDENTS DO: Calendar Helper responds: Today is ________.

6. TEACHER SAY: **If today is ________. What was yesterday?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

7. TEACHER SAY: **If today is ________. What will tomorrow be?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

8. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day), the (number date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

9. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket

10. TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket?**

Remember from yesterday, there were 30 straws in the Tens pocket and 0 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there is 1. I'm going to count them. (Count the straws.) Now we have 31 straws. How many days have we been in school?

STUDENTS DO: Respond together: 31.

11. TEACHER SAY: **My Calendar Helper will draw a circle around the number 31 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 31 on the number chart, then sits down.

12. TEACHER SAY: **______ drew a circle around the number 31 on the number chart. Let's use our number chart to count the days we have circled so far. Say the numbers you know and listen**

to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

13. TEACHER SAY: Let's add something to our Calendar time. Starting today we are going to practice classifying objects. To classify things means to look at the objects and put them into groups based on something they have in common such as color, shape, or size. I will model for you today. Tomorrow our Calendar Helper will get a chance to classify my objects. Let's all say classify.

STUDENTS DO: Repeat: Classify.

14. TEACHER SAY: Today I have a bag of objects. I am going to classify – or sort – these by their color. Raise your hand if you have an idea on how we can do that.

STUDENTS DO: Raise hands to answer the question. Selected student answers the question.

15. TEACHER SAY: (Base your color categories on the items you have.) All we need to do to classify by color is to put all of the items of the same color together. We can put the blue together, the red together, and so on.

Note for the Teacher: You may choose to sort these items into buckets, if available.

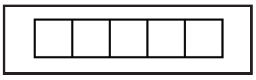
TEACHER DO: Model sorting or classifying the objects of the same color together.

STUDENTS DO: Observe the teacher and help when asked.

16. TEACHER SAY: We will practice classifying some more tomorrow during calendar time!

Learn (25-30 mins)

Directions



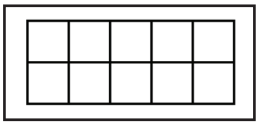
1. TEACHER SAY: Over the past several weeks, we have been learning so much about numbers from 1 to 20. We are going to continue counting on and learning more numbers. Each day we will have one or two special numbers of the day! Today, our special numbers are 21 and 22. Let's show how much 21 is using our ten frame.

TEACHER DO: Show the students one of the blank five frames.

2. TEACHER SAY: In the past, we have shown how much our numbers are using five frames. Remember a five frame has five spots on it to hold five ones. It helps us count numbers more quickly because when we see a full five frame, we don't have to count each of the ones, we know there are five. So if my five frame is full, how many ones do we have?

TEACHER DO: Use **Calling Sticks** to call on a student.

STUDENTS DO: Selected student responds: 5 ones.



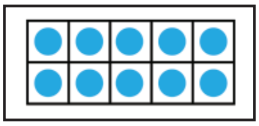
3. TEACHER DO: Show students one of the blank ten frames.

TEACHER SAY: This is a ten frame. Just like the five frame, the ten frame helps us count bigger numbers more quickly. Can anyone guess how many ones a ten frame holds?

TEACHER DO: Use **Calling Sticks** to call on a student.

STUDENTS DO: Selected student responds: 10 ones.

4. TEACHER SAY: That is correct! A ten frame holds up to 10 ones. Let's show number 21 using our ten frames. We will need three ten frames to draw the number 21. Watch me draw the dots and count aloud with me as I draw.



TEACHER DO: Display one ten frame and fill it in as you count aloud with students.

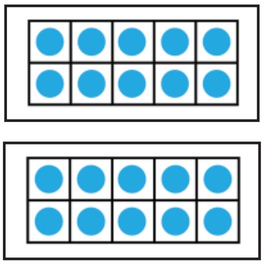
STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: I drew 10 dots in the ten frame. Did we count to 21 yet?

STUDENTS DO: Respond together: No.

TEACHER SAY: What do we need to do to keep counting?

STUDENTS DO: Respond together (or raise hands to be called on): Add another ten frame.



5. TEACHER DO: Add another ten frame and draw 10 more dots on the frame as you count from 11-20 with students.

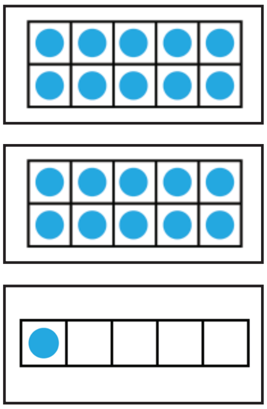
STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Now I have 20 dots on the ten frames. Did we count to 21 yet?

STUDENTS DO: Respond together: No.

TEACHER SAY: What do we need to do to keep counting?

STUDENTS DO: Respond together (or raise hands to be called on): Add another ten frame.



6. TEACHER DO: Add another ten frame and draw 1 more dot on the frame as you count to 21 with students.

7. TEACHER SAY: Now we have 21 dots on the ten frames! Thank you for helping me! Let's count the dots together again.

STUDENTS DO: Count aloud with the teacher.

5. TEACHER SAY: We have 21 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Raise hands to volunteer. Selected student responds: 2.

TEACHER SAY: And how many extra ones are there?

STUDENTS DO: Respond together: 1.

TEACHER SAY: Right! So the number 21 is 2 sets of ten and 1 extra one. Who can come up and point to the 2 tens?

STUDENTS DO: Raise hands to volunteer. Selected student points to the 2 filled ten frames.

TEACHER SAY: Great! Now point to the 1 that makes this show 21.

STUDENTS DO: Selected student points to the 1 dot in the third ten frame.

TEACHER SAY: Great job!

6. TEACHER DO: Write the number 21 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open to the next clean page.

TEACHER SAY: The number 21 has two digits or numbers. When we write it, we start with a 2 (for our sets of tens) and then right next to it, we write a 1. A 2 and a 1.

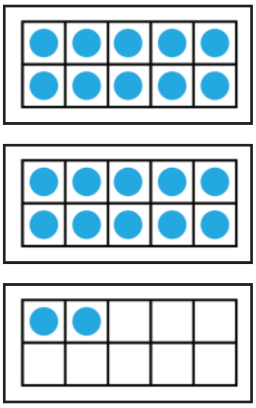
Let's Skywrite the number 21. Do you remember how to do that? We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 2 and then a 1. Let's sky write 21 three times.

STUDENTS DO: Stand and **Skywrite** the number 21 three times.

TEACHER SAY: Now, let's practice writing 21 in our journals. Write the number 21 three times. Remember that we are just learning, so your numbers may not be perfect. That's okay! Try your best!

STUDENTS DO: Write the number 21 in their journals three times.

TEACHER SAY: Great job! Now, let's look at the number 22. 22 is our second special number of the day. When we count, it comes right after 21. 22 is also a two-digit number. Let's show how much 22 is using our ten frames. Count with me as I draw the dots.



7. TEACHER DO: Draw 22 dots in the ten frames. Follow the same steps you did to show 21.

STUDENTS DO: Help the teacher recognize that additional ten frames are needed to count from 11-20 and 20-22. Count aloud as the teacher draws 22 dots on the ten frames.

8. TEACHER SAY: We have 22 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Raise hands to volunteer. Selected student responds: 2.

TEACHER SAY: And how many extra ones are there?

STUDENTS DO: Respond together: 2.

TEACHER SAY: Right! So the number 22 is 2 sets of ten and 2 extra ones. Who can come up and point to the 2 tens?

STUDENTS DO: Raise hands to volunteer. Selected student points to the 2 filled ten frames.

TEACHER SAY: Great! Now point to the 2 ones that make this show 22.

STUDENTS DO: Selected student points to the 2 dots in the third ten frame.

TEACHER SAY: Great job!

9. TEACHER DO: Write the number 22 on the chalkboard (or somewhere all students can see it).

TEACHER SAY: Great! We write the number 22 with a 2 and another 2 right beside it. Now, let's practice Skywriting the number 22 three times!

STUDENTS DO: Stand and **Skywrite** the number 22 three times.

TEACHER SAY: Now, let's practice writing 22 in our journals. Write the number 22 three times. Remember that we are just learning, so your numbers may not be perfect. That's okay! Try your best!

STUDENTS DO: Write the number 22 in their journals three times.

10. TEACHER SAY: Let's try something new. I am going to pass out bags of counting objects. You will work with your Shoulder Partner for this activity.

TEACHER DO: Hand out bags of items to each pair of partners.

TEACHER SAY: We are going to learn about addition today. Everybody say addition with me.

STUDENTS DO: Repeat the word with the teacher: Addition.

TEACHER SAY: Addition means we put different sets together and count how many we have in all. Take your objects out.

STUDENTS DO: Take counting objects out.

11. TEACHER SAY: **With your partner, I want you to make a set of 6 objects and a set of 4 objects. You will make two sets – one with 6 objects and one with 4 objects.**

STUDENTS DO: Work with Shoulder Partners to create a set of 6 objects and a set of 4 objects.

TEACHER DO: As students are working, draw a set of 6 and a set of 4 on the board to model.

TEACHER SAY: **Let's count the objects in our sets. I am going to write the number underneath my set on the board.**

STUDENTS DO: Count the objects in each set aloud.

TEACHER DO: After counting together, write 6 under the set of 6 and 4 under the set of 4.

12. TEACHER SAY: **So we have a set of 6 objects and a set of 4 objects. I want to know how many objects we have in all. What can we do to find this out?**

STUDENTS DO: Raise hand to respond. Selected students answer the question.

TEACHER SAY: **That's right, we can put the two sets together and count all of the objects. That is addition! Let's do that now. Push the sets together and count all of the objects from both sets. How many do we have all together?**

STUDENTS DO: Count all of the objects from both sets and raise hands to respond.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Selected student answers the question. (Call on several, if needed.)

TEACHER SAY: **That's correct, 10! We can talk about addition like this: 6 plus 4 equals 10. It would take a long time to write down all those words. Luckily, there are symbols we can use to represent some of the words. We can write that addition problem like this.**

TEACHER DO: Write 6 + 4 = 10 on the board and read the addition sentence aloud.

13. TEACHER SAY: **I see two symbols in this problem that we need to look at. First is the plus (+) sign. We use this symbol when we add numbers together, like we just did. Let's all say plus sign.**

STUDENTS DO: Repeat: plus sign.

TEACHER DO: Point to the plus sign in the problem or draw another plus sign on the board.

14. TEACHER SAY: **The other symbol may look familiar to you. This is an equal sign. We use the equal sign when we add to show us the answer or the total from adding the sets together. The numbers on both sides of an equal sign are always worth the same amount. Let's all say equal sign.**

STUDENTS DO: Repeat: equal sign.

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

TEACHER SAY: **Now you read the problem aloud with me using the symbols: 6 plus 4 equals 10.**

STUDENTS DO: Read the problem aloud with the teacher.

15. TEACHER SAY: **Let's try one more addition problem today. With your partner, I want you to make a set of 5 objects and a set of 3 objects. You will make two sets – one with 5 and one with 3.**

STUDENTS DO: Work with **Shoulder Partner** to create a set of 5 objects and a set of 3 objects.

TEACHER DO: As students are working, draw a set of 5 and a set of 3 on the board to model.

16. TEACHER SAY: Let's count the objects in our sets. I am going to write the number underneath my set on the board.

STUDENTS DO: Count the objects in each set aloud.

TEACHER DO: After counting together, write 5 under the set of 5 and 3 under the set of 3.

TEACHER SAY: We have a set of 5 objects and a set of 3 objects. I want to know how many objects we have in all. What can we do to find this out?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Selected student responds: Add the sets together.

TEACHER SAY: Yes! We need to add them together or put them into one set and count all of the objects. Let's do that now. Count all of the objects from both sets. How many do we have all together?

STUDENTS DO: Count all of the objects from both sets and raise hands to respond.

TEACHER DO: Using **Calling Sticks**, select students to share their answers.

STUDENTS DO: Selected students respond: 8.

17. TEACHER SAY: That's correct, 8! So we can say that 5 plus 3 equals 8. We can write that addition problem like this.

TEACHER DO: Write 5 + 3 = 8 on the board and read the addition sentence aloud.

TEACHER SAY: Now you read the problem aloud with me: 5 plus 3 equals 8.

STUDENTS DO: Read the problem aloud with the teacher.

TEACHER SAY: Wonderful job! Go ahead and put all of your objects in the bag. We will continue to practice addition tomorrow.

STUDENTS DO: Place objects in the bag to be collected.

Share (5 mins)

Directions

1. TEACHER SAY: Turn to your Shoulder Partner and talk to each other about what you learned about addition. Try to use some of the vocabulary words we learned today – plus, equals, add.

STUDENTS DO: Talk to shoulder partners about what they learned about addition.

TEACHER SAY: Who would like to share with the class what they learned?

STUDENTS DO: Raise hands to volunteer. Selected students share what they learned about addition.

TEACHER DO: Help students share their learning and use new vocabulary words.

Lesson 32 Overview

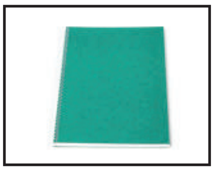
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Classify objects by color • Count from 1 to 24 • Write numerals 23 and 24 • Apply the ten-frame structure as a way to represent quantities • Add within 10 using manipulatives • Use addition within 10 to solve word problems	• Addition (Add) • Classify • Equals • Plus • Story problem • Ten frame	• Create or print out 6 ten frames for Learn segment. • Gather 5-7 objects for students to sort by color. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area



Math Journal



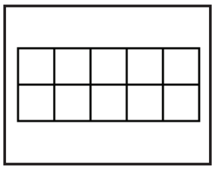
Set of 5-7 crayons, blocks, (other colored items) to sort by color. If possible, have several items of the same color for sorting.



Sets of 10 counters (one set per pair of students)



Six Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: How many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

3. TEACHER SAY: _______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: I have a question for my Calendar Helper. What month is it?

STUDENTS SAY: Calendar Helper responds: The month is ______.

4. **TEACHER SAY: Now I would like ______ to lead us in saying the days of the week together.**

STUDENTS DO: Say the days of the week with the Calendar Helper.

5. **TEACHER SAY: I have a question for my Calendar Helper. What day of the week is it?**

STUDENTS DO: Calendar Helper responds: Today is ________.

6. **TEACHER SAY: If today is ________. What was yesterday?**

TEACHER DO: Help Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

7. **TEACHER SAY: If today is ________. What will tomorrow be?**

TEACHER DO: Help Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

8. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you say the date, too?

STUDENTS DO: Repeat the date.

9. **TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

10. **TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?**

Remember from yesterday, there were 30 straws in the Tens pocket and 1 straw in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 2. I'm going to count them. (Count the straws.) Now we have 32 straws. How many days have we been in school?

STUDENTS DO: Respond together: 32.

11. **TEACHER SAY: My Calendar Helper will draw a circle around the number 32 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 32 on the number chart.

TEACHER SAY: ______ drew a circle around the number 32 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

12. **TEACHER SAY: Today I have a bag of objects. I am going to classify – or sort - these by their color. Who remembers how we can classify by color?**

TEACHER DO: Using **Calling Sticks**, select a student to share their thoughts.

STUDENTS DO: Selected students answer the question.

TEACHER SAY: **(Base colors on the items you have). All we need to do to classify by color is to put all of the items of the same color together. My Calendar Helper is going to classify these items by color. We will all help _____, if needed.**

TEACHER DO: Assist the Calendar Helper with sorting as needed.

STUDENTS DO: Calendar Helper sorts items by color. Seated students offer help, if needed.

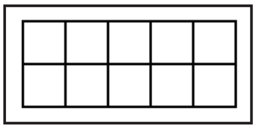
13. TEACHER SAY: **Great job! We classified these items by color!**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Today we have two new special numbers to learn! These two numbers come after 22. Does anyone know what numbers they are? How do you know?**

STUDENTS DO: Respond to question: 23 and 24; discuss how they knew, if possible.



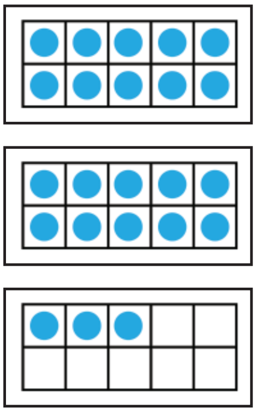
2. TEACHER DO: Show the students one of the blank ten frames.

TEACHER SAY: **Yesterday we learned that this is a ten frame. The ten frame helps us count bigger numbers more quickly. Who remembers how many ones a 10 frame holds?**

STUDENTS DO: Respond together: 10 ones.

3. TEACHER SAY: **That is correct! A ten frame holds up to 10 ones. Let's draw our number 23 using our ten frames. How many ten frames do you think we will need? How many did we need to count to 21 and 22?**

STUDENTS DO: Raise hands to answer. Selected student will respond: 3.



TEACHER SAY: **We needed three ten frames to count to 21 and 22. We will need three ten frames to draw the number 23. Watch me draw the dots and count aloud as I draw.**

TEACHER DO: Display three ten frames. Draw 23 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 23 dots on the ten frames.

4. TEACHER SAY: **We have 23 dots on our ten frames. How many of our ten frames are full?**

STUDENTS DO: Raise hands to answer. Selected student responds: 2.

TEACHER SAY: **And how many ones are on the last ten frame?**

STUDENTS DO: Raise hands to answer. Selected student responds: 3.

TEACHER SAY: **Right! So the number 23 has 2 sets of ten and 3 extra ones.**

5. TEACHER DO: Write 23 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open to the next clean page.

TEACHER SAY: **The number 23 has two digits – or numbers. When we write it, we start with a 2 (for our sets of tens) and a 3. Let's Skywrite the number 23. We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 2 and then a 3. Let's sky write 23 three times together.**

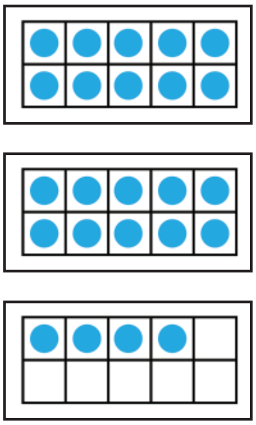
STUDENTS DO: Stand and **Skywrite** the number 23 three times.

TEACHER SAY: **Now, let's practice writing 23 in our journals. Write the number 23 three times. Remember that we are learning, so your numbers may not be perfect. That's okay! Try your best!**

STUDENTS DO: Write the number 23 in their journals three times.

6. TEACHER SAY: Great job! Now, let's look at the number 24. 24 is our second special number of the day. 24 is also a two-digit number. Let's draw it on our ten frames. How many ten frames do you think we will need to count to 24? How do you know?

STUDENTS DO: Raise hands to answer. Selected students explain how they know they will need three ten frames.



TEACHER SAY: Count with me as I draw the dots.

TEACHER DO: Draw 24 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 24 dots on the ten frames.

7. TEACHER SAY: We have 24 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Raise hands to answer. Selected student responds: 2.

TEACHER SAY: And how many ones are on the last ten frame?

STUDENTS DO: Raise hands to answer. Selected student responds: 4.

TEACHER SAY: Right! So the number 24 is 2 sets of ten and 4 extra ones.

8. TEACHER DO: Write the number 24 on the chalkboard (or somewhere all students can see it).

TEACHER SAY: We write the number 24 with a 2 and a 4 right beside it. Now, let's practice Skywriting the number 24 three times!

STUDENTS DO: Stand and **Skywrite** the number 24 three times.

TEACHER SAY: Now, let's practice writing 24 in our journals. Write the number 24 three times. Remember that we are just learning, so your numbers may not be perfect. That's okay! Try your best! When we are done, keep your journals out.

STUDENTS DO: Write the number 24 in their journals three times.

9. TEACHER SAY: Wonderful! Yesterday we learned how to add two numbers together to find out how many we had in all. Today we will continue to practice adding two sets together. Open your math journals to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

10. TEACHER SAY: I am going to read to you a story with a math problem in it. First you will listen carefully to the story. Then you will draw a picture to match the story problem in our journal and then add to find the answer. Are you ready?

STUDENTS DO: Confirm they are ready.

11. TEACHER SAY: Karim went to the market to buy some fruit. He bought 3 apples and 3 oranges. How much fruit did Karim buy in all?

TEACHER DO: Repeat the word problem, if needed.

STUDENTS DO: Listen to the word problem.

TEACHER SAY: Now let's draw the problem. How many apples did Karim buy? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands: 3.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Yes! Karim bought 3 apples. Let's draw a set of 3 apples in our journals. I will draw 3 apples on the board. Don't worry if your apples don't look like apples. Just make sure you have 3.**

TEACHER DO: Draw 3 apples on the board.

STUDENTS DO: Draw 3 apples in math journal.

TEACHER SAY: **Now, how many oranges did Karim buy? Whisper the answer into your hands.**

STUDENTS DO: Whisper the answer into their hands: 3.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Right! Now we need to draw our set of 3 oranges. Draw 3 oranges in your journal. Remember, it's not important for them to look exactly like oranges.**

TEACHER DO: Draw a set of 3 oranges on the board.

STUDENTS DO: Draw a set of 3 oranges in math journal.

12. **TEACHER SAY:** **Wonderful! Now, we have a set of 3 apples and a set of 3 oranges. The story asks us how much fruit Karim bought all together. If we want to see how much fruit Karim has in all, what do we need to do? How do you know?**

STUDENTS DO: Raise hands to answers. Selected student responds: Count all of the fruit.

TEACHER SAY: **Yes! We need to add them together or count all of the fruit. Let's do that now. Count all of the apples and oranges together. How many pieces of fruit does Karim have all together?**

STUDENTS DO: Count all of the fruit from both sets.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Selected student answers: 6.

TEACHER SAY: **That's correct, 6! So we can say that 3 plus 3 equals 6. We can write that addition problem like this.**

TEACHER DO: Write 3 + 3 = 6 on the board.

TEACHER SAY: **Let's write this in our journals.**

STUDENTS DO: Write 3 + 3 = 6 in math journals.

13. **TEACHER SAY:** **Do you remember the names of the two symbols we just wrote?**

TEACHER DO: Point to the plus sign in the problem or draw another plus sign on the board.

TEACHER SAY: **What do we call this sign? (+)**

STUDENTS DO: Respond together: plus sign.

TEACHER SAY: **That's right! And we use the plus sign to add numbers or sets together. What do we call this sign? (=)**

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond together: equal sign.

TEACHER SAY: **That's right, and we use the equal sign in addition problems to tell us how many in all. Let's try one more today. Are you ready?**

STUDENTS DO: Confirm they are ready.

14. **TEACHER SAY: Amal had 2 balloons. Farah had 7 balloons. How many balloons did they have in all?**

TEACHER DO: Repeat the word problem, if needed.

STUDENTS DO: Listen to the word problem.

TEACHER SAY: Let's draw the problem. How many balloons did Amal have? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Let's draw Amal's 2 balloons in our journals.

TEACHER DO: Draw 2 balloons on the board.

STUDENTS DO: Draw 2 balloons in math journal.

TEACHER SAY: How many balloons did Farah have? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Right! Now we need to draw Farah's 7 balloons. Draw 7 balloons in your journal.

TEACHER DO: Draw a set of 7 balloons on the board.

STUDENTS DO: Draw a set of 7 balloons in math journal.

17. **TEACHER SAY: Wonderful! Now, we have a set of 2 balloons and a set of 7 balloons. If we want to know how many balloons Amal and Farah have in all, what do we need to do? How do you know?**

STUDENTS DO: Raise hands to respond. Selected students answer and explain how they know.

TEACHER SAY: Yes! We need to add them together or count all of the balloons. Let's do that now. Count all of the balloons you drew to see how many there are all together. How many do we have all together?

STUDENTS DO: Count all of the balloons from both sets and raise hands to respond: 9.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

18. **TEACHER SAY: That's correct, 9! So we can say that 2 plus 7 equals 9. We can write that addition problem like this.**

TEACHER DO: Write 2 + 7 = 9 on the board.

TEACHER SAY: Let's write this in our journals.

STUDENTS DO: Write 2 + 7 = 9 in math journals.

19. **TEACHER SAY: Who can come up and point to the plus sign and tell us what it means?**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student with a raised hand. Help them answer, if needed.

20. TEACHER SAY: Who can come up and point to the equal sign and tell us what it means?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select a student with a raised hand. Help them answer, if needed.

TEACHER SAY: You all did a wonderful job! We'll practice again tomorrow.

STUDENTS DO: Keep math journals for Share.

Share (5-10 mins)

Directions

1. TEACHER SAY: Let's turn to the next blank page in our math journals.

STUDENTS DO: Turn to the next blank page in math journal.

TEACHER SAY: I would like for you to draw something you learned today in math. We covered a lot of new things today! Draw or write something you learned. You have about 3 minutes.

STUDENTS DO: Write or draw something we covered in math today.

TEACHER DO: Walk around the room and observe students for 3 minutes while the students draw. Take note of students who may need additional instruction.

2. TEACHER SAY: Who would like to stand and share their learning with their classmates?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Select students with their hands raised.

Lesson 33 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Classify objects by color
- Apply the ten-frame structure as a way to represent quantities
- Count from 1 to 25
- Write the numeral 25
- Add within 10 using manipulatives

KEY VOCABULARY

- Addition (Add)
- Classify
- Equals
- Plus
- Symbols
- Ten frame

LESSON PREPARATION FOR THE TEACHER

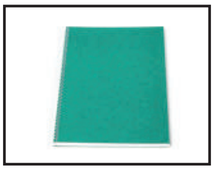
- Create or print out 3 ten frames for Learn segment.
- Gather 6-9 objects for students to sort by color. For example: 3 red crayons, 2 green crayons, and 4 blue crayons or 2 red circles, 4 yellow triangles, and 2 blue squares (all the same size)
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area



Math Journal



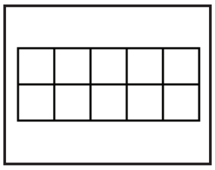
6-9 objects for students to sort by color



Sets of 10 counters (one set per pair of students)



Three Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: How many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: _______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: **I have a question for my Calendar Helper. What month is it?**

STUDENTS SAY: Calendar Helper responds: The month is _______.

3. TEACHER SAY: **Now I would like for ______ to lead us in saying the days of the week together.**

STUDENTS DO: Say the days of the week with the Calendar Helper.

4. TEACHER SAY: **I have a question for my Calendar Helper. What day of the week is it?**

STUDENTS DO: Calendar Helper responds: Today is ________.

TEACHER SAY: **If today is ________. What was yesterday?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: **If today is ________. What will tomorrow be?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

5. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket?**

Yesterday, there were 30 straws in the Tens pocket and 2 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 3. I'm going to count them. (Count the straws.) Now we have 33 straws. How many days have we been in school?

STUDENTS DO: Respond together: 33.

6. TEACHER SAY: **My Calendar Helper will draw a circle around the number 33 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 33 on the number chart, then sits down.

TEACHER SAY: **______ drew a circle around the number 33 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know. .

7. TEACHER SAY: **Look at my bag of objects. I want your help classifying – or sorting – these objects by their color. Who remembers how we can classify by color?**

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Using **Calling Sticks**, select a student to share their thoughts.

TEACHER SAY: **All we need to do to classify by color is to put all of the items of the same color together. (Based on the items you have). My Calendar Helper is going to classify these items by color.**

TEACHER DO: Assist the Calendar Helper with sorting as needed.

STUDENTS DO: Calendar Helper sorts items by color. Seated students observe and help when asked.

TEACHER SAY: **Great job!**

Learn (25-30 mins)

Directions

1. **TEACHER SAY:** **We have learned numbers all the way up to 24. Let's count from 1 to 24 together.**

TEACHER DO: Count from 1 to 24 aloud.

STUDENTS DO: Count aloud with the teacher.

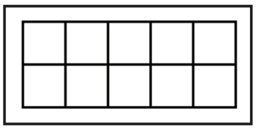
2. **TEACHER SAY:** **Today, we will learn one new special number! Does anyone want to guess what number that is? How do you know?**

STUDENTS DO: Raise hands to answer the question; selected students answer and explain how they know.

TEACHER SAY: **Today we are going to learn the number 25. 25 is the number that comes right after 24.**

3. **TEACHER SAY:** **Let's play a counting game and count up to 25 together! We are going to play Jump Up! Do you remember how to play? We will squat down and clap as we count from 1 to 24. When we get to 25, we will jump up and shout 25! Let's play two times.**

STUDENTS DO: Squat and clap as they count from 1 to 24. Jump up and shout when they get to 25. Play the game two times and then sit down.

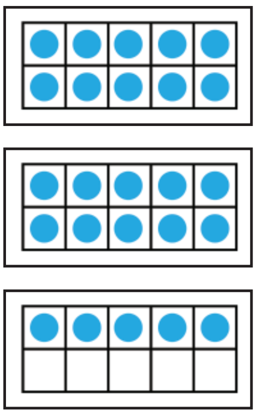


4. **TEACHER DO:** Show the students one of the blank ten frames.

TEACHER SAY: **25 is our special number today! Remember that we are using ten frames to help us show how many our numbers are. We will use the ten frames today to see how many 25 is. The ten frame also helps us count bigger numbers more quickly. Who remembers how many ones a 10 frame holds?**

STUDENTS DO: Respond to the question together: 10 ones.

TEACHER SAY: **That is correct! A ten frame holds up to 10 ones. Let's draw our number 25 using our ten frames. How many ten frames do you think we will need to draw 25 dots? How do you know?**



TEACHER DO: Use **Calling Sticks** to select students to answer the question.

STUDENTS DO: Respond to the question and explain how they know.

TEACHER SAY: **We will need three ten frames to draw the number 25. Watch me draw the dots and count aloud as I draw.**

TEACHER DO: Draw 25 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 25 dots on the ten frames.

5. TEACHER SAY: **We have 25 dots on our ten frames. How many of our ten frames are full?**

STUDENTS DO: Raise hands to answer; selected student responds: 2.

TEACHER SAY: **And how many ones are on the last ten frame?**

STUDENTS DO: Raise hands to answer. Selected student responds: 5.

TEACHER SAY: **Right! So the number 25 has 2 sets of ten and 5 extra Ones.**

6. TEACHER DO: Write the number 25 on the chalkboard (or somewhere all students can see). Hand out math journals and have students open them to the next clean page.

TEACHER SAY: **The number 25 has two digits or numbers. When we write it, we start with a 2 and then a 5. Let's Skywrite the number 25. We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 2 and then a 5. Let's sky write 25 three times.**

STUDENTS DO: Stand and skywrite the number 25 three times.

TEACHER SAY: **Now, let's practice writing 25 in our journals. Write the number 25 three times. Remember that we are just learning, so your numbers may not be perfect. That's okay! Try your best!**

STUDENTS DO: Write the number 25 in their journals three times.

TEACHER SAY: **Show your work to your Shoulder Partner. Circle your Shoulder Partner's best 25. They will circle yours.**

STUDENTS DO: Circle their partner's best 25.

7. TEACHER SAY: **Great job! Keep your journal out. Today we are going to keep practicing adding two sets together. We are going to work with our Shoulder Partners. I am going to pass out a bag of objects to help us add sets together.**

TEACHER DO: Hand out bags of objects to each pair of partners.

TEACHER SAY: **Take out your objects. You and your Shoulder Partner are going to work together to practice adding. Decide who will go first. You will both get a turn!**

STUDENTS DO: Decide who goes first.

TEACHER SAY: **I want the first partner to make a set of 8 objects. I want the second partner to make a set of 2 objects.**

STUDENTS DO: Make sets of objects as directed by the teacher.

TEACHER DO: While students are working, draw a set of 8 and a set of 2 on the board to model.

TEACHER SAY: **Help me check my work. Help me count to make sure I have the right number in my sets on the board.**

STUDENTS DO: Help the teacher count the sets on the board.

TEACHER DO: Write 8 under the set of 8. Write 2 under the set of 2.

8. TEACHER SAY: **I want to know how many objects you and your partner have all together. How can we find that out? Talk to your Shoulder Partner about what you think we should do to find out how many objects you and your partner have all together.**

STUDENTS DO: Talk to their shoulder partners.

TEACHER DO: Use **Calling Sticks** to select students (and their partners) to answer the question.

9. TEACHER SAY: You and your Shoulder Partner will put all your objects together and count them. Do that and then count to see how many objects you and your partner have all together. Write your answer in your math journals.

STUDENTS DO: Count the objects they put together and write their answers in their math journals.

TEACHER DO: Use **Calling Sticks** to select students and their partners to solve the problem.

STUDENTS DO: Selected students share their answer: 10.

TEACHER SAY: That's correct! So we can say that 8 plus 2 equals 10. We can write that addition problem like this.

TEACHER DO: Write 8 + 2 = 10 on the board.

TEACHER SAY: Now you write the addition problem in your journals.

STUDENTS DO: Write 8 + 2 = 10 in their journals.

10. TEACHER SAY: Do you remember the names of the two symbols we just wrote?

TEACHER DO: Point to the plus sign in the problem or draw another plus sign on the board.

TEACHER SAY: What do we call this sign? (+)

STUDENTS DO: Respond: plus sign.

TEACHER SAY: That's right! And we use the plus sign to add numbers or sets together. What do we call this sign? (=)

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond: equal sign.

TEACHER SAY: That's right, and we use the equal sign in addition problems to tell us how many in all. Let's try one more today. Work with your partner again. One of you make a set of 4 objects. The other partner should make a set of 2 objects. Do that now.

STUDENTS DO: Work with their Shoulder Partners; one partner creates a set of 4 while the other partner creates a set of 2.

TEACHER DO: Draw a set of 4 and a set of 2 on the board to model.

10. TEACHER SAY: Let's count the objects in our sets. I am going to write the number underneath my set on the board.

STUDENTS DO: count the objects in each set aloud.

TEACHER DO: After counting together, write 4 under the set of 4 and 2 under the set of 2.

TEACHER SAY: So we have a set of 4 objects and a set of 2 objects. I want to know how many objects you and your partner have all together. What do we need to do?

STUDENTS DO: Raise hands to answer. Selected student answers: Add the sets together.

11. TEACHER SAY: Yes! We need to add them together or put them into one set and count all of the objects. Do that now. Work with your partner to count all of the objects from both sets. How many do you have altogether?

STUDENTS DO: Count all of the objects from both sets and raise hand to respond: 6.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: That's correct, 6! So we can say that 4 plus 2 equals 6. We can write that addition problem like this.

TEACHER DO: Write 4 + 2 = 6 on the board.

TEACHER SAY: Read the problem aloud with me as I point.

STUDENTS DO: Read the problem aloud with the teacher.

TEACHER SAY: Now you write the addition problem in your journals.

STUDENTS DO: Write the addition problem in their journals.

TEACHER SAY: Wonderful job! Go ahead and put all of your objects in the bag. We will practice adding again tomorrow. Keep your journals out for Share.

Share (5-10 mins)

Directions

1. **TEACHER SAY: Open your math journal to the next blank page.**

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: On this page I would like for you to write today's number – 25. Then, I would like for you to draw 25 objects (balloons, balls, rocks, etc.).

STUDENTS DO: Write the number 25 and draw 25 objects in their math journals.

TEACHER DO: Walk around the room and offer assistance as needed. Take note of students who may need additional instruction.

TEACHER SAY: Now, I want you to share your drawing with your Shoulder Partner. Count your neighbor's items and be sure there are 25.

STUDENTS DO: Share their drawing with their shoulder partners and check each other's work.

Lesson 34 Overview

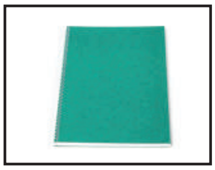
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Apply the ten-frame structure as a way to represent quantities • Count from 1 to 27 • Write the numerals 26 and 27 • Add within 10 using manipulatives • Use addition within 10 to solve word problems	• Addition (Add) • Equal Sign (=) • Plus • Story Problem • Ten frame	• Create or print out 6 ten frames for the Learn segment.

MATERIALS

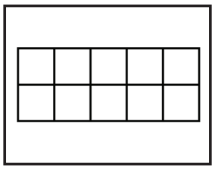
Calendar Area



Math Journal



Six Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: How many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

3. TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper .

TEACHER SAY: I have a question for my Calendar Helper. What month is it?

STUDENTS SAY: Calendar Helper responds: The month is ______.

4. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

5. TEACHER SAY: **I have a question for my Calendar Helper. What day of the week is it?**

STUDENTS DO: Calendar Helper responds: Today is ________.

6. TEACHER SAY: **If today is ________. What was yesterday?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

7. TEACHER SAY: **If today is ________. What will tomorrow be?**

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

8. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is day (day), the (number date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

9. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Can you say the date, too?**

STUDENTS DO: Repeat the date.

10. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

11. TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket?**

Yesterday, there were 30 straws in the Tens pocket and 3 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 4. I'm going to count them. (Count the straws.) Now we have 34 straws. How many days have we been in school?

STUDENTS DO: Respond together: 34.

12. TEACHER SAY: **My Calendar Helper will draw a circle around the number 34 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 34 on the number chart, then sits down.

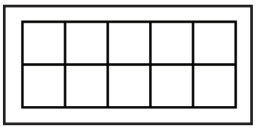
TEACHER SAY: **______ drew a circle around the number 34 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

TEACHER SAY: **Great job!**

Learn (25-30 mins)

Directions



1. TEACHER SAY: Today we have two new special numbers to learn! These two numbers come after 25. Does anyone know what numbers they are? How do you know?

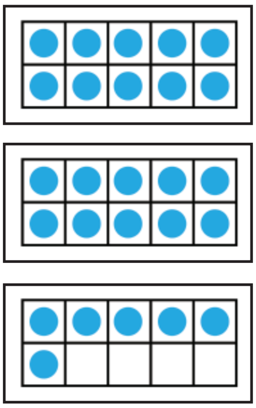
STUDENTS DO: Raise hands to answer. Selected students respond to question and explain how they know.

TEACHER DO: Show the students one of the blank ten frames.

TEACHER SAY: We are going to show 26 and 27 using ten frames. The ten frame helps us count bigger numbers more quickly. Who can tell us how many ones a 10 frame holds?

STUDENTS DO: Respond to the question together: 10 ones.

TEACHER SAY: That is correct! A ten frame holds up to 10 Ones. Let's show 26 using our ten frames. We will need three ten frames to draw the number 26. Watch me draw the dots and count with me as I draw.



TEACHER DO: Draw 26 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 26 dots on the ten frames.

2. TEACHER SAY: We have 26 dots on our ten frames. How many of our ten frames are full?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: How many extra ones are on the last ten frame?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Right! So the number 26 has 2 sets of ten and 6 extra ones.

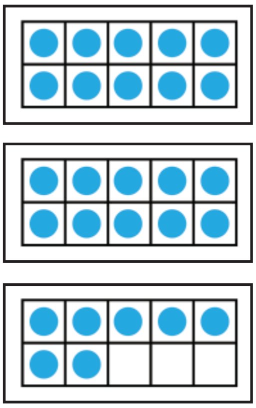
3. TEACHER DO: Write the number 26 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open to the next clean page.

STUDENTS DO: Open their math journals to the next clean page.

TEACHER SAY: The number 26 has two digits or numbers. When we write it, we start with a 2 (for our sets of tens) and then 6 (for our extra ones). Let's Skywrite the number 26. We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 2 and then a 6. Let's sky write 26 three times.

STUDENTS DO: Stand and skywrite the number 26 three times.

TEACHER SAY: Let's practice writing 26 in our journals now. Write the number 26 three times. Then, check your Shoulder Partner's work.



STUDENTS DO: Write 26 in their journals and check their partner's work.

4. TEACHER SAY: Great job! Now, let's look at the number that comes after 26 – 27. The number 27 is our second special number of the day. 27 is also a two-digit number. Let's show it on our ten frames. Count with me as I draw the dots.

TEACHER DO: Draw 27 dots in the ten frames.

STUDENTS DO: Students count aloud as the teacher draws 27 dots on the ten frames.

TEACHER SAY: We have 27 dots on our ten frames. How many full ten frames do you see?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **How many extra ones are on the last ten frame?**

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Right! So the number 27 is 2 sets of ten and 7 extra ones.**

5. TEACHER DO: Write the number 27 on the chalkboard.

TEACHER SAY: **We write the number 27 with a 2 and a 7 right beside it. Now, let's practice Skywriting the number 27 three times!**

STUDENTS DO: Stand and skywrite the number 27 three times.

TEACHER SAY: **Let's practice writing 27 in our journals now. Write the number 27 three times. Then, check your Shoulder Partner's work.**

STUDENTS DO: Write 27 in their journals and check their partner's work.

6. TEACHER SAY: **Wonderful! We have been practicing adding two numbers together to find out how many we have in all. Open your math journals to the next blank page. We are going to work on some more story problems together. Story problems are stories that have a math problem for us to answer in them.**

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: **I am going to read a story problem to you. You will draw a picture in your math journal to match the story problem. Are you ready?**

STUDENTS DO: Confirm they are ready.

TEACHER SAY: **Youssef has 3 rocks in his collection. On the way home from school he found 2 more rocks. How many rocks does Youssef have in all?**

TEACHER DO: Repeat the word problem, if needed.

STUDENTS DO: Listen to the story problem.

7. TEACHER SAY: **Now we need to draw the problem. How many rocks did Youssef have in his collection at the beginning of the story? Whisper the answer into your hands.**

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Yes! Youssef had 3 rocks in his collection. Draw a set of 3 rocks in our journals. I will draw 3 rocks on the board. I will write the number 3 to tell how many are in my first set. You do the same in your journals.**

TEACHER DO: Draw 3 rocks on the board. Write 3 under the set.

STUDENTS DO: Draw 3 rocks in their math journals. Write 3 under the set.

TEACHER SAY: **Now, how many rocks did Youssef find on his way home from school? Whisper the answer into your hands.**

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: **Right! Now we need to draw our set of 2 rocks. Draw 2 rocks in your journal. I will draw 2 on the board and write the number 2 to tell how many rocks there are. You do the same in your journals.**

TEACHER DO: Draw a set of 2 rocks on the board. Write the number 2 under the set.

STUDENTS DO: Draw a set of 2 rocks in their math journals. Write the number 2 under the set.

8. TEACHER SAY: Wonderful! Now, we have a set of 3 rocks and a set of 2 rocks. If we want to know how many rocks Youssef has in his collection now, what do we need to do? How do you know?

STUDENTS DO: Raise hands to respond.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer and how they know.

TEACHER SAY: Yes! We need to add them together or count all of the rocks. Let's do that now. Add to find out how many rocks Youssef has in his collection now. Write your answer in your math journals.

STUDENTS DO: Count all of the rocks from both sets and raise hands to respond.

TEACHER DO: Using **Calling Sticks**, select students to share their answers.

TEACHER SAY: That's correct, 5! So we can say that 3 plus 2 equals 5. We can write that addition problem like this.

TEACHER DO: Write 3 + 2 = 5 on the board.

TEACHER SAY: Who can help me read this addition problem?

STUDENTS DO: Raise hands to answer the question. Selected student reads the problem aloud.

TEACHER SAY: Write the addition problem in your math journal near your drawing.

STUDENTS DO: Write 3 + 2 = 5 in their math journals.

9. TEACHER DO: Point to the plus sign in the problem or draw another plus sign on the board.

TEACHER SAY: What do we call this sign? (+)

STUDENTS DO: Respond together: plus sign.

TEACHER SAY: That's right! And we use the plus sign to add numbers or sets together. What do we call this sign? (=)

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond together: equal sign.

10. TEACHER SAY: That's right, and we use the equal sign in addition problems to tell us how many in all. Let's try one more today. Deena had 1 football. Omar had 6 footballs. How many balls did they have in all?

TEACHER DO: Repeat the word problem, if needed.

STUDENTS DO: Listen to the word problem.

11. TEACHER SAY: Let's draw the problem. How many footballs did Deena have? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Draw Deena's 1 football in your journal. I will draw them on the chalkboard. I will also write the number 1 to tell how many footballs are in my set. You do the same in your journals.

TEACHER DO: Draw 1 football on the board. Write the number 1 under the set.

STUDENTS DO: Draw 1 football in their math journals. Write the number 1 under the set.

TEACHER SAY: How many footballs did Omar have? Whisper the answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

TEACHER SAY: Right! Now we need to draw Omar's 6 footballs. Draw 6 footballs in your journal. I will draw 6 footballs on the board. Then, I will write the number 6 to tell how many footballs are in the set.

TEACHER DO: Draw a set of 6 footballs on the board. Write the number 6 under the set.

STUDENTS DO: Draw a set of 6 footballs in math journal. Write the number 6 under the set.

12. TEACHER SAY: Wonderful! Now, we have a set of 1 football and a set of 6 footballs. If we want to know how many balloons we have in all, what do we need to do? How do you know?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer and explain how they know.

TEACHER SAY: Yes! We need to add them together or count all of the balloons. Let's do that now. Add the footballs together to see how many Deena and Omar have in all.

STUDENTS DO: Count all of the footballs from both sets and raise hands to respond.

TEACHER DO: Using **Calling Sticks**, select students to share their answers.

TEACHER SAY: That's correct, 7! So we can say that 1 plus 6 equals 7. We can write that addition problem like this. .

TEACHER DO: Write 1 + 6 = 7 on the board.

TEACHER SAY: Who would like to read this addition problem for us?

STUDENTS DO: Raise their hands to answer. Selected student reads the addition problem aloud.

TEACHER SAY: Great job! Now you write the addition problem in your math journals.

STUDENTS DO: Write 1 + 6 = 7 in their math journals.

TEACHER SAY: Wonderful work today! Keep your math journals for Share.

Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's turn to the next blank page in our journals.**

STUDENTS DO: Turn to the next blank page.

TEACHER SAY: Practice writing the special numbers from today, 26 and 27. I want you to write 26 three times and then write 27 three times.

STUDENTS DO: Write the numbers 26 and 27 three times each.

TEACHER DO: Walk around the room and observe students, offering help to students as needed. Take note of students who may need additional instruction.

2. **TEACHER SAY: Now, I want you to share the numbers you wrote with your Shoulder Partner. I want you to find the best number 26 and the best number 27 your partner wrote in their journal and circle them.**

STUDENTS DO: Share the numbers they wrote with their shoulder partners. Circle the best-drawn 26 and 27 in their shoulder partner's math journal.

3. **TEACHER SAY: Now everyone hold up your math journals and show all of your classmates your great work. Nice job! You may put your math journals away now.**

STUDENTS DO: Hold up math journals to show classmates their work, then put math journals away.

Lesson 35 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Classify objects by shape
- Apply the ten-frame structure as a way to represent quantities
- Count from 1 to 29
- Write the numerals 28 and 29
- Add within 10 using pictures and objects

KEY VOCABULARY

- Addition (Add)
- Classify
- Equal Sign (=)
- Plus
- Symbols
- Ten frame

LESSON PREPARATION FOR THE TEACHER

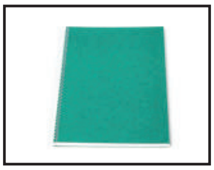
- Draw and cut out 4 circles, 4 triangles, and 4 squares out of paper for the classification activity. All of the shapes should be the same color and size.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Have tape available. Students will attach shapes to the labeled papers.
- Create or print out 6 ten frames for Learn segment.
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area



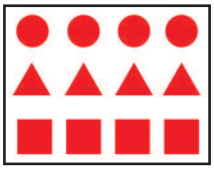
Math Journal



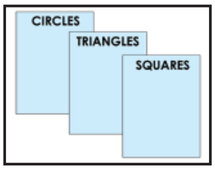
Sets of 10 counters (one set per pair of students)



4 circles, 4 triangles, 4 squares



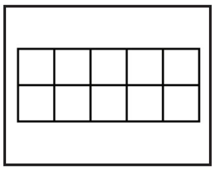
3 sheets of paper, labeled Circles, Triangles, Squares



Tape



Three Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

TEACHER SAY: How many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: I have a question for my Calendar Helper. What month is it?

STUDENTS SAY: Calendar Helper responds: The month is ______.

2. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: I have a question for my Calendar Helper. What day of the week is it?

STUDENTS DO: Calendar Helper responds: Today is ________.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you say the date, too?

STUDENTS DO: Repeat the date.

3. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Remember from yesterday, there were 30 straws in the Tens pocket and 4 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 5. I'm going to count them. (Count the straws.) Now we have 35 straws. How many days have we been in school?

STUDENTS DO: Respond together: 35.

4. TEACHER SAY: **My Calendar Helper will draw a circle around the number 35 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 35 on the number chart, then sits down.

TEACHER SAY: **______ drew a circle around the number 35 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

5. TEACHER SAY: **I have some objects I would like you to help me classify – or sort. Let's take a look.**

TEACHER DO: Hold up a circle and ask students to name the shape.

STUDENTS DO: Respond together: circle.

TEACHER DO: Hold up a triangle and ask students to name the shape.

STUDENTS DO: Respond together: triangle.

TEACHER DO: Hold up a square and ask students to name the shape.

STUDENTS DO: Respond together: square.

TEACHER SAY: **Great! I have more circles, triangles, and squares here. How do you think we should classify – or sort these items?**

TEACHER DO: Take out the shapes and display them so students can see them. Using **Calling Sticks**, select students to share their thoughts.

TEACHER SAY: **We have three different shapes, so let's classify these items by shape.**

TEACHER DO: Display the three labeled papers: Circles, Triangles, Squares. Read the words aloud to make sure students understand the categories. Draw a picture of the shapes on each, if necessary. Take out tape.

TEACHER SAY: **When I call your name I want you to come up and take a shape and put it in the right group. Use the tape to attach the shape to the paper. You may ask for help if you need it.**

TEACHER DO: Use **Calling Sticks** to select students one at a time to come up and sort shapes.

STUDENTS DO: Selected students take shapes and tape them to the correct paper (circles on the Circles paper and so on).

TEACHER SAY: **Great job! We classified these items by shape!**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Yesterday we learned the numbers 26 and 27. Does anyone know what two numbers come next when we count? How do you know?**

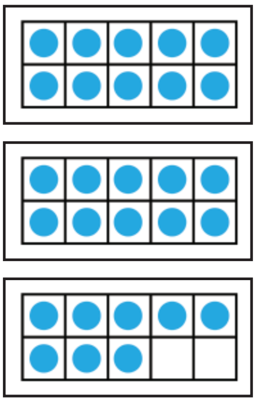
STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Call on students with hands raised.

TEACHER SAY: **28 and 29 come next! Let's show how much 28 is using our ten frames. Do you remember how many ten frames we will need?**

STUDENTS DO: Respond together: 3.

TEACHER SAY: **We will need three ten frames to show 28. Watch me draw the dots and count aloud as I draw.**



TEACHER DO: Draw 28 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 28 dots on the ten frames.

2. TEACHER SAY: **We have 28 dots on our ten frames. How many of our ten frames are full?**

STUDENTS DO: Respond together: 2.

TEACHER SAY: **How many ones do we have in the last ten frame?**

STUDENTS DO: Respond together: 8.

TEACHER SAY: **Right! The number 28 has 2 sets of ten and 8 extra ones.**

3. TEACHER DO: Write the number 28 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open them to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: **The number 28 has two digits or numbers. When we write it, we start with a 2 (for our sets of tens) and then an 8 (for our extra ones). Let's Skywrite the number 28. We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 2 and then a 8. Let's sky write 28 three times.**

STUDENTS DO: Stand and skywrite the number 28 three times.

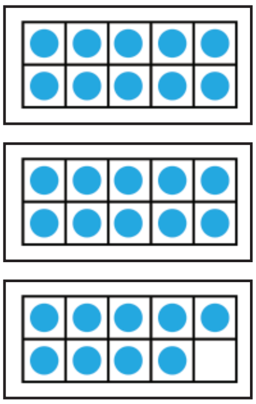
TEACHER SAY: **Now let's practice writing it in our math journals. Remember that we are just learning and it might not be perfect. We will be practicing writing our numbers a lot and you will get better! Write the number 28 in your journal three times.**

STUDENTS DO: Write the number 28 in their journals three times.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

4. TEACHER DO: Write the number 29 on the chalkboard.

TEACHER SAY: **Now, let's look at 29. When we count, 29 comes after 28. The number 29 is our second special number of the day. 29 is also a two-digit number. Let's show how much 29 is using our ten frames. Count with me as I draw the dots.**



TEACHER DO: Draw 29 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 29 dots on the ten frames.

TEACHER SAY: **We have 29 dots on our ten frames. How many full ten frames do you see?**

STUDENTS DO: Respond together: 2.

TEACHER SAY: **How many ones do we have in the last ten frame?**

STUDENTS DO: Respond together: 9.

TEACHER SAY: **Right! The number 29 has 2 sets of ten and 9 extra ones.**

5. TEACHER DO: Write the number 29 on the chalkboard.

TEACHER SAY: **Great! We write the number 29 with a 2 and a 9 right beside it. Now, let's**

practice Skywriting the number 29 three times!

STUDENTS DO: Stand and skywrite the number 29 three times.

TEACHER SAY: Now let's practice writing it in our math journals. Remember that we are just learning and it might not be perfect. We will be practicing writing our numbers a lot and you will get better! Write the number 29 in your journal three times.

STUDENTS DO: Write the number 29 in their journals three times.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

6. TEACHER SAY: Great job! Today we are going to continue to practice adding two sets together. We are going to work with our shoulder partners. I am going to hand out bags of ____ (objects) to help us add sets together.

TEACHER DO: Hand out bags of objects to each pair of partners.

TEACHER SAY: Take out your objects and decide who is going first. You will both have a turn. The first partner should make a group of 4 objects. The second partner will also make a group of 4 objects. I will draw the sets on the board.

STUDENTS DO: Create two sets of 4 objects.

TEACHER DO: Draw a set of 4 and another set of 4 on the board to model.

TEACHER SAY: Have your Shoulder Partner check your work to make sure you created a set of 4. I am going to write the numbers underneath my sets on the board.

STUDENTS DO: Count the objects in each other's sets.

TEACHER DO: Write the number under the sets of objects you drew on the board.

TEACHER SAY: We have a set of 4 objects and another set of 4 objects. I want to know how many objects we have in all. What should we do?

TEACHER DO: Using **Calling Sticks**, select students to share their answers.

TEACHER SAY: Yes! We need to add them together or put them into one set and count all of the objects together. Let's do that now. Count to find out how much you and your partner have all together.

STUDENTS DO: Count all of the objects from both sets and raise hands to respond.

TEACHER DO: Select students to answer the question.

TEACHER SAY: That's correct, 8! So we can say that 4 plus 4 equals 8. We can write that addition problem like this.

TEACHER DO: Write 4 + 4 = 8 on the board.

7. TEACHER SAY: Who remembers what we call this sign? (+)

STUDENTS DO: Respond together: plus sign.

TEACHER SAY: That's right! And we use the plus sign to add numbers or sets together. Who remembers what we call this sign? (=)

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond together: equal sign.

TEACHER SAY: That's right, and we use the equal sign in addition problems to tell us how many in all. Who can read this addition problem aloud?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students to read the addition problem aloud.

9. TEACHER SAY: Let's try one more together today. The first partner will make a set of 2 objects. The second partner will also make a set of 2 objects.

STUDENTS DO: Create two sets of 2 objects.

TEACHER DO: Draw two sets of 2 objects on the board to model.

TEACHER SAY: Have your Shoulder Partner check your work to make sure you created a set of 2. I am going to write the numbers underneath my sets on the board.

STUDENTS DO: Count the objects in each other's sets.

TEACHER DO: Write the number under the sets of objects you drew on the board.

TEACHER SAY: So we have a set of 2 objects and another set of 2 objects. I want to know how many objects we have in all. What should we do?

TEACHER DO: Using **Calling Sticks**, select students to share their answers.

TEACHER SAY: Yes! We need to add them together or put them into one set and count all of the objects together. Let's do that now. Count to find out how much you and your partner have all together.

STUDENTS DO: Count all of the objects from both sets and raise hands to respond.

TEACHER DO: Select students to answer the question.

TEACHER SAY: That's correct, 4! So we can say that 2 plus 2 equals 4. We can write that addition problem like this.

TEACHER DO: Write 2 + 2 = 4 on the board.

10. TEACHER SAY: Who remembers what we call this sign? (+)

STUDENTS DO: Respond together: plus sign.

TEACHER SAY: That's right! And we use the plus sign to add numbers or sets together. Who remembers what we call this sign? (=)

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond together: equal sign.

TEACHER SAY: That's right, and we use the equal sign in addition problems to tell us how many in all. Who can read this addition problem aloud?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students to read the addition problem aloud.

TEACHER SAY: Great work today!

Share (5-10 mins)

Directions

1. **TEACHER SAY: We won't use our math journals today. I just want to hear from you. What have you learned about adding numbers together so far? What are you still confused about? Take a minute to think about what you would like to share or ask and then we'll talk.**

TEACHER DO: Allow students about 1 minute wait time.

STUDENTS DO: Think about what they would like to share or ask.

TEACHER SAY: Raise your hand if you have something you would like to share or ask about adding numbers.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on several students. Take note of any questions they mention. Offer praise for all students.

Lesson 36 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Classify objects by shape and color
- Count by ones and tens to 30
- Apply the ten-frame structure as a way to represent quantities
- Write the numeral 30

KEY VOCABULARY

- Classify
- Ten frame
- Thirty

LESSON PREPARATION FOR THE TEACHER

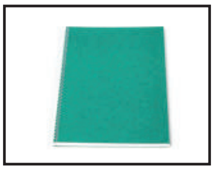
- Draw, color, and cut out 1 red circle, 1 blue circle, 1 yellow circle, 1 red triangle, 1 blue triangle, 1 yellow triangles, 1 red square, 1 blue square, and 1 yellow square for the classification activity. All of the shapes should be the same size.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Red, Blue, Yellow. You will display these during the lesson after students have identified the categories for classification.
- Have tape available. Students will attach shapes to the labeled papers.
- Create or print out 3 ten frames for Learn segment.

MATERIALS

Calendar Area



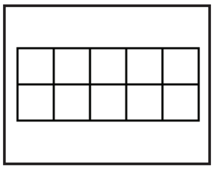
Math Journal



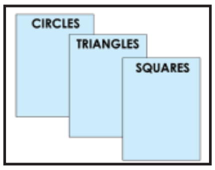
Tape



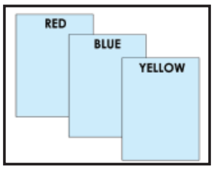
Three Ten Frames



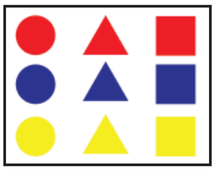
3 sheets of paper, labeled Circles, Triangles, Squares



3 sheets of paper, labeled Red, Blue, Yellow



1 red circle, 1 blue circle, 1 yellow circle, 1 red triangle, 1 blue triangle, 1 yellow tri-angles, 1 red square, 1 blue square, and 1 yellow square



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

TEACHER SAY: Students, how many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: _____, select one of your classmates to tell us what month it is.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: The month is ______.

2. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: _____, select another colleague to tell us what day it is today.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: Today is ______.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER DO: Have Calendar Helper point to today's date on the calendar.

TEACHER SAY: _____ is going to say today's date. Then you are going to repeat it.

STUDENTS DO: Calendar Helper says the date: Today is (day) the (number date) of (month) (year).

TEACHER DO: Help the Calendar Helper, as needed.

STUDENTS DO: Repeat the date.

3. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Yesterday, there were 30 straws in the Tens pocket and 5 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 6. I'm going to count them. (Count the straws.) Now we have 36 straws. How many days have we been in school?

STUDENTS DO: Respond together: 36.

4. TEACHER SAY: My Calendar Helper will draw a circle around the number 36 on the number chart to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 36 on the number chart, then sits down.

TEACHER SAY: ______ drew a circle around the number 36 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

5. TEACHER SAY: Does anyone remember how we sorted objects yesterday?

STUDENTS DO: Raise hands to volunteer. Selected student answers: By shape.

TEACHER SAY: Yes, by shape! I'm going to show you some new objects and I want you to think about how you want to sort them. Don't say anything yet! Just think.

TEACHER DO: Take out the shapes and display them so students can see them. Give students about 30 seconds to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: Raise your hand if you think you know how the shapes could be sorted.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking.

STUDENTS DO: Identify shape and color as categories for sorting.

TEACHER SAY: Can we sort these shapes in more than one way?

STUDENTS DO: Respond together: Yes.

TEACHER SAY: Yes, we can sort them by shape or by color. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper as we did yesterday.

TEACHER DO: Display the three shape papers. Use **Calling Sticks** to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, take the shapes back down and display the color papers. Repeat the sorting steps to have students sort the shapes by color.

STUDENTS DO: When called on, take a shape and tape it to the correct color paper.

TEACHER SAY: You are all super sorters! Nice work!

Learn (25-30 mins)

Directions

1. TEACHER SAY: We have learned all of the numbers up to 29. Today, we have one very special new number to learn! Does anyone want to guess what number that is? Raise your hand if you think you know.

STUDENTS DO: Try to figure out the special number. Raise hands to volunteer.

TEACHER DO: Call on students with hands raised. If a student answers 30, ask them how they knew it would be 30.

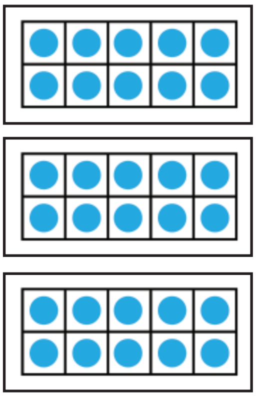
TEACHER SAY: The special number we are learning today is 30. Let's use our ten frames to see what 30 looks like. How many ones does a ten frame hold?

STUDENTS DO: Raise hands to volunteer. Selected students answer the question: 10.

TEACHER SAY: That is correct! A ten frame holds up to 10 ones. How many ten frames do you think we will need to show 30? Raise your hand if you think you know and can tell me how you know.

STUDENTS DO: Raise hands to volunteer. Selected students answer the question and explain their thinking.

2. TEACHER SAY: I am going to draw dots in the tens frames to show what 30 looks like. Count along with me as I draw.



TEACHER DO: Draw 30 dots in the ten frames.

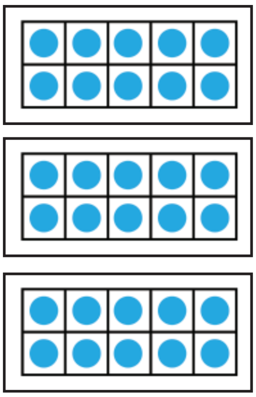
STUDENTS DO: Students count aloud as the teacher draws 30 dots on the ten frames.

TEACHER SAY: We have 30 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

3. TEACHER SAY: The number 30 has 3 sets of ten and 0 extra ones. Remember when I said the ten frames can help us count big numbers quickly? Let's take another look at our ten frames. How many dots does each frame hold?

STUDENTS DO: Respond together: 10.



TEACHER SAY: Let's check that together. Count aloud with me.

TEACHER DO: Count the dots in the first ten frame.

STUDENTS DO: Count along with the teacher.

TEACHER DO: Write the number 10 under the ten frame you counted.

4. TEACHER SAY: This ten frame holds 10 dots. How many dots do you think are in the first two ten frames?

STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

TEACHER SAY: Let's count the first 2 ten frames together.

TEACHER DO: Count the dots in the first 2 ten frames aloud.

STUDENTS DO: Count aloud with the teacher to 20.

TEACHER SAY: I'm going to write 20 under this ten frame.

TEACHER DO: Write the number 20 under the second ten frame.

5. TEACHER SAY: Stand up if you know how many dots are in the third frame.

TEACHER DO: Call on a standing student. Students should know that there are 10 dots in the third frame.

TEACHER SAY: Does anyone know what number I should write under the third ten frame? Stand up if you know.

TEACHER DO: Call on a standing student. Students may know that the number 30 should go under the third ten frame. If students do not know, count all of the dots again and write 30 under the last ten frame.

STUDENTS DO: Count aloud with the teacher (if the teacher counts aloud to 30).

6. TEACHER SAY: Look at the numbers under the ten frames! We can count by 10's to 30. Watch as I point to each ten frame and count by 10's: 10, 20, 30. Now you count with me.

TEACHER DO: Count by 10's to 30, pointing at each ten frame.

STUDENTS DO: Count by 10's with the teacher.

TEACHER SAY: Who can come up and point to the ten frames as we count by 10's to 30?

TEACHER DO: Use **Calling Sticks** to select students to come up and point and count by 10's. Repeat 2-3 times.

STUDENTS DO: Selected students point to the ten frames and count by 10's to 30.

Note for the Teacher: Keep the filled ten frames for tomorrow's Learn lesson.

7. TEACHER SAY: Let's play a counting game and count up to 30! We are going to play Jump Up! Do you remember how to play? We will squat down and clap as we count from 1 to 29. When we get to 30 we will jump up and shout 30! Let's play three times.

STUDENTS DO: Squat and clap as they count from 1 to 29. Jump up and shout when they get to 30. Play the game three times and then sit down.

8. TEACHER DO: Write the number 30 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open to the next blank page.

STUDENTS DO: Open journals to the next blank page.

TEACHER SAY: The number 30 has two digits or numbers. All of the numbers we have been writing the last two weeks start with a 2. But 30 starts with a 3. When we write 30, we write a 3 and then a 0. Let's Skywrite the number 30. We will pretend our pointer finger is a pencil. We will hold it up in the air and write a 3 and then a 0. Let's sky write 30 three times.

STUDENTS DO: Stand and skywrite the number 30 three times.

TEACHER SAY: Great job! Now, let's practice writing the number 30 in our journals three times.

STUDENTS DO: Write the number 30 in their journals three times.

TEACHER SAY: Check your Shoulder Partner's work. Draw a circle around their best 30.

STUDENTS DO: Check their partner's work and circle their best 30.

TEACHER SAY: You did a great job today! Tomorrow, we'll practice counting to 30 again.

Share (5-10 mins)

Directions

1. **TEACHER SAY: You've been working with Shoulder Partners a lot, helping each other and checking each other's work. Think about one of your partners and something they're really good at in math. I'll give you about a minute.**

STUDENTS DO: Think about something one of their partners has been good at in math.

TEACHER SAY: Raise your hand if you'd like to tell us about one of your classmates and what they're good at in math.

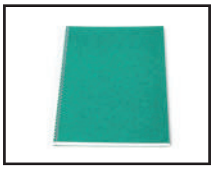
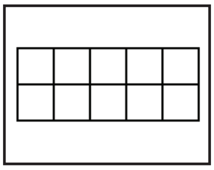
STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands.

Lesson 37 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens to 30 • Read and write numerals from 0-30 • Apply the ten-frame structure as a way to represent quantities • Add within 10 using pictures and objects	• Addition (Add) • Equal Sign (=) • Plus • Skip counting • Symbols • Ten frame	• Have available the filled ten frames from yesterday's lesson. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area		Math Journal	
Sets of 10 counters (one set per pair of students)		Three Ten Frames from previous lesson	

Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

TEACHER SAY: **How many months are in a year?**

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: **______ is going to lead us in saying the months of the year.**

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: **_____, select one of your classmates to tell us what month it is.**

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: The month is _______.

2. TEACHER SAY: **Now I would like for ______ to lead us in saying the days of the week together.**

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: _____, select another colleague to tell us what day it is today.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: Today is ______.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

3. TEACHER DO: Have Calendar Helper point to today's date on the calendar.

TEACHER SAY: _____ is going to say today's date. Then you are going to repeat it.

STUDENTS DO: Calendar Helper says the date: Today is (day) the (number date) of (month) (year).

TEACHER DO: Help the Calendar Helper, as needed.

STUDENTS DO: Repeat the date.

4. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Yesterday, there were 30 straws in the Tens pocket and 6 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 7. I'm going to count them. (Count the straws.) Now we have 37 straws. How many days have we been in school?

STUDENTS DO: Respond together: 37.

5. TEACHER SAY: My Calendar Helper will draw a circle around the number 37 on the number chart to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 37 on the number chart, then sits down.

TEACHER DO: ______ drew a circle around the number 37 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: We don't have a new number to learn today. Instead, we are going to practice all of the numbers we have learned so far. Who can tell me the largest or biggest number we have learned?**

STUDENTS DO: Respond together: 30.

TEACHER SAY: That's right! Let's play a counting game and count up to 30! We are going to play Hops! Do you remember how to play? We will hop up and down on one leg while we count to 30. Let's play three times.

STUDENTS DO: Hop up and down on one foot while counting to the number 30. Play the game three times and then sit down.

2. **TEACHER DO:** Display the three filled ten frames from the previous lesson.

TEACHER SAY: What did we learn yesterday using our ten frames?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands. Possible answers may include:

- Ten frames hold 10 dots
- Ten frames help us count by 10's
- We need three ten frames to make 30
- Ten frames show us that 30 has 3 tens and 0 ones

TEACHER SAY: Great answers! Does anyone remember how we counted by 10's yesterday? That's called skip counting because we skip over some numbers to count. We can count by 10's to count to 30. Watch as I point to each ten frame and count by 10's: 10, 20, 30.

STUDENTS DO: Observe as the teacher skip counts by ten to 30.

TEACHER SAY: Now you do it.

STUDENTS DO: Count by 10's to 30 with the teacher.

3. **TEACHER DO:** Hand out math journals and have students open to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Let's see how well we know all of the numbers we have been learning. I am going to call out a number and I want you to write it down in your journal. Are you ready? The first number I want you to write is the number 23.

STUDENTS DO: Write number 23 in math journals.

TEACHER DO: Walk around the room and help students as needed. You can also use this time to make note of students who may need extra help with their numbers.

TEACHER SAY: I would like for _____ to go write the number 23 on the board. Be sure to check your answer!

TEACHER DO: Choose one student to write the answer on the board. Select a student who wrote the number correctly in their journal.

STUDENTS DO: Selected student writes the number on the board.

4. **TEACHER DO:** Repeat the process for 4-5 more numbers. Choose a variety of numbers between 10 and 30 for students to practice.

STUDENTS DO: Write numbers in their journals. If selected, write numbers on the board.

TEACHER DO: Walk around to monitor students' work. Take note of who is writing them correctly and who may need additional practice.

TEACHER SAY: Good work! We will practice more numbers tomorrow.

5. TEACHER SAY: For the next few days we are going to practice adding, but we're going to do it a little differently than we have been. Today I am going to give you an addition problem and you are going to find the answer with your Shoulder Partner using a bag of counting objects.

TEACHER DO: Hand out bags of objects to each pair of partners.

6. TEACHER SAY: I am going to write an addition problem on the board. Work with your Shoulder Partner to find the answer. Be sure to share the counters and work together to create each set and then add them together. The first problem is 4 + 3 = ___.

TEACHER DO: Write 4 + 3 = ____ on the board.

STUDENTS DO: Work with partners to create the sets and add them together.

TEACHER DO: Walk around the room and monitor students' work. Do this for each problem. Take note of students who may need additional help.

TEACHER SAY: Who can tell me what 4 + 3 equals?

STUDENTS DO: Raise hands to solve the problem.

TEACHER DO: Using **Calling Sticks**, select a student to share answer and write the answer on the board.

7. TEACHER SAY: That is correct! Let's find the answer to this one: 2 + 7 = ___.

TEACHER DO: Write 2 + 7 = ____ on the board.

STUDENTS DO: Work with partners to create the sets and add them together.

TEACHER SAY: Who can tell me what 2 + 7 equals?

STUDENTS DO: Raise hands to solve the problem.

TEACHER DO: Using **Calling Sticks**, select a student to share answer and write the answer on the board.

8. TEACHER SAY: That is correct! Let's do one more. Find the answer for 5 + 5 = ___.

TEACHER DO: Write 5 + 5 = ____ on the board.

STUDENTS DO: Work with partners to create the sets and add them together.

TEACHER SAY: Who can tell me what 5 + 5 equals?

STUDENTS DO: Raise hands to solve the problem.

TEACHER DO: Using **Calling Sticks**, select a student to share answer and write the answer on the board.

TEACHER SAY: That is correct! 5 + 5 = 10. Great job! Put your counting objects away. We'll solve some more problems together tomorrow.

Share (5-10 mins)

Directions

1. TEACHER SAY: For sharing time today, I would like for you and your Shoulder Partner to discuss what you know about adding. What does adding mean? What math symbols do you use? How do you find the answer? How do you know if you have the right answer? What can you do if you don't have the right answer?

STUDENTS DO: Discuss what they know about addition with their partners for 2-3 minutes.

TEACHER DO: Walk around the room and listen to the students talk to their partners. Then, using **Calling Sticks**, select 3 pairs to share with the class.

STUDENTS DO: Share what they know about addition.

TEACHER DO: Offer praise and correct misconceptions.

Lesson 38 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Classify objects by their shape and size
- Count by ones and tens to 30
- Read and write numerals from 0-30
- Add within 10 using pictures and objects
- Use addition within 10 to solve word problems

KEY VOCABULARY

- Addition (Add0
- Classify
- Large
- Medium
- Small
- Story problem

LESSON PREPARATION FOR THE TEACHER

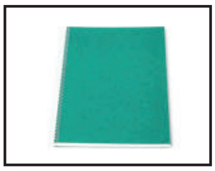
- Draw, color, and cut out 1 small circle, 1 medium circle, 1 large circle, 1 small triangle, 1 medium triangle, 1 large triangle, 1 small square, 1 medium square, and 1 large square for the classification activity. All of the shapes should be the same color.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Small, Medium, Large. You will display these during the lesson after students have identified the categories for classification.
- Have tape available. Students will attach shapes to the labeled papers.
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area



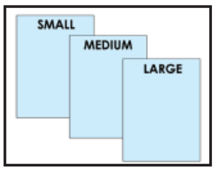
Math Journal



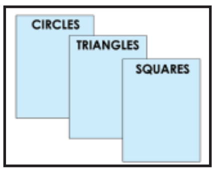
Sets of 10 counters (one set per pair of students)



3 sheets of paper, labeled Small, Medium, Large



3 sheets of paper, labeled Circles, Triangles, Squares



1 small circle, 1 medium circle, 1 large circle, 1 small triangle, 1 medium triangle, 1 large triangle, 1 small square, 1 medium square, and 1 large square



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: Students, how many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: _____, select one of your classmates to tell us what month it is.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: The month is ______.

3. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: _____, select another colleague to tell us what day it is today.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: Today is ______.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

4. TEACHER DO: Have Calendar Helper point to today's date on the calendar.

TEACHER SAY: _____ is going to say today's date. Then you are going to repeat it.

STUDENTS DO: Calendar Helper says the date: Today is (day) the (number date) of (month) (year).

TEACHER DO: Help the Calendar Helper, as needed.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Yesterday, there were 30 straws in the Tens pocket and 7 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 8. I'm going to count them. (Count the straws.) Now we have 38 straws. How many days have we been in school?

STUDENTS DO: Respond together: 38.

6. TEACHER SAY: **My Calendar Helper will draw a circle around the number 38 on the number chart to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 38 on the number chart, then sits down.

TEACHER DO: ______ drew a circle around the number 38 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

7. TEACHER SAY: **The last time we sorted objects, we sorted them by shape and color. I have some new objects for you to sort. I'm going to show them to you and I want you to think about how you want to sort them. Don't say anything yet! Just think.**

TEACHER DO: Take out the shapes and display them so students can see them. Give students about 30 seconds to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: **Raise your hand if you think you know how the shapes could be sorted.**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking. Call on several students until they have identified shape and color as categories for sorting.

TEACHER SAY: **Can we sort these shapes in more than one way?**

STUDENTS DO: Respond together: Yes.

TEACHER SAY: **Yes, we can sort them by shape or by size. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper.**

TEACHER DO: Display the three shape papers. Use **Calling Sticks** to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, take the shapes back down and display the size papers. Explain the meanings of small, medium, and large. Draw pictures on the papers to represent a small, medium, and large shape, if necessary. Repeat the sorting steps to have students sort the shapes by size.

STUDENTS DO: When called on, take a shape and tape it to the correct size paper.

TEACHER SAY: **You are all super sorters! Nice work!**

Learn (25-30 mins)

Directions

1. TEACHER SAY: Let's start with a counting game to count up to 30! We are going to play Counting Around! Here's how we play:

- I'm going to start by pointing to myself and counting 1.
- Then I will point to one of you. If I point to you, you stand and say the next number: 2.
- The next person I point to will stand and say the next number: 3. And so on.
- If you are standing and I point to you, say the next number and sit down.
- We're going to count all the way to 30 that way. We will play three times.

STUDENTS DO: Play Counting Around with the teacher. Pay attention so they know what number is next. Play the game three times and then sit down.

2. TEACHER SAY: That was fun! Good job! Let's practice counting by 10's again. But this time, let's look at our numbers chart. Who can come up and point to the number 10 on the number chart?

TEACHER DO: Use **Calling Sticks** to select a student to go to the number chart and point to 10. Repeat the process for 20 and 30.

STUDENTS DO: Go to the number chart when called on and point to 10, 20, or 30. Seated students observe.

TEACHER SAY: What do you notice about the numbers 10, 20, and 30 on the number chart?

STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

TEACHER SAY: They are near each other in a row. We can use the number chart to skip count by 10's, too. Count with me as I point.

STUDENTS DO: Count by 10's to 30 with the teacher.

TEACHER SAY: Good! Remember when we talked about patterns and how patterns repeat? Keep an eye on that number chart to look for repeating patterns as we learn more numbers!

3. TEACHER DO: Hand out math journals and ask students to open to the next blank page.

STUDENTS DO: Open journals to the next clean page.

TEACHER SAY: Let's practice writing numbers again. Just like yesterday, I am going to call out a number and I want you to write it down in your journal. Are you ready? The first number I want you to write is the number 19.

STUDENTS DO: Students will write the number 19 in math journals.

TEACHER DO: Walk around the room and help students as needed. Use this time to make note of students who are writing the number correctly and who may need extra help with their numbers.

4. TEACHER SAY: I would like for _____ to go write the number 19 on the board for me. Be sure to check your answer!

TEACHER DO: Choose one student who you have seen write the number correctly in their journal to write the answer on the board.

STUDENTS DO: Selected students write the number on the board.

TEACHER DO: Repeat the process for 4-5 more numbers between 10 and 30.

STUDENTS DO: Write numbers in their journals. If selected, write numbers on the board.

TEACHER DO: Walk around to monitor students' work. Take note of who is writing them correctly and who may need additional practice.

TEACHER SAY: **Great work! We know how to write all of our numbers from 1-30. We will use our math journals again in a few minutes, but for now, just put them on the corner of your desk.**

STUDENTS DO: Put their math journals to the side.

5. **TEACHER SAY:** **We are still practicing adding within 10. Yesterday I wrote a math problem on the board. Today I am going to read a story problem to you and you are going to find the answer with your Shoulder Partner using our bag of ____ (objects). Remember that story problems are stories with math problems for you to solve.**

TEACHER DO: Hand out bags of objects to each pair of partners.

TEACHER SAY: **I am going to read a story problem to you. Work with your Shoulder Partner to find the answer. Be sure to work together to create each set and then solve the problem. Are you ready?**

TEACHER SAY: **Mariam has 1 cat. Her brother Amr has 3 dogs. How many pets do they have in all?**

TEACHER DO: Repeat the problem as needed.

STUDENTS DO: Work with partners to create a set of 1 and set of 3 and add them together.

TEACHER SAY: **What sets did you create?**

STUDENTS DO: Respond together: 1 and 3.

TEACHER SAY: **Since we are trying to find out how many pets they have in all, we have to put those two sets together. That means this is an addition problem.**

TEACHER DO: Write 1 + 3 = ____ on the board.

TEACHER SAY: **Who can tell me what 1 + 3 equals?**

STUDENTS DO: Raise hands to answer question.

TEACHER DO: Using **Calling Sticks**, select a student to share the answer. Write the answer on the board.

TEACHER SAY: **1 + 3 = 4. Wave your hands if you got the right answer.**

STUDENTS DO: Wave hands if they got the right answer.

7. **TEACHER SAY:** **Let's try another one. Heba has 6 crackers. Jomana has 4 crackers. How many crackers do they have in all?**

TEACHER DO: Repeat the problem as needed.

STUDENTS DO: Work with partners to create a set of 6 and set of 4 and add them together.

TEACHER SAY: **What sets did you create?**

STUDENTS DO: Respond together: 6 and 4.

TEACHER SAY: **Since we are trying to find out how many crackers they have in all, we have to put those two sets together. That means this is an addition problem.**

TEACHER DO: Write 6 + 4 = ____ on the board.

TEACHER SAY: **Who can tell me what 6 + 4 equals?**

STUDENTS DO: Raise hands to answer question.

TEACHER DO: Using **Calling Sticks**, select a student to share the answer. Write the answer on the board.

TEACHER SAY: 6 + 4 = 10. Wave your hands if you got the right answer.

STUDENTS DO: Wave hands if they got the right answer.

8. TEACHER SAY: Let's do one more. Mustafa has 4 funny hats. Salma has 3 funny hats. How many hats do they have all together?

TEACHER DO: Repeat the problem as needed.

STUDENTS DO: Work with partners to create a set of 4 and a set of 3 and add them together.

TEACHER SAY: What sets did you create?

STUDENTS DO: Respond together: 4 and 3.

TEACHER SAY: Since we are trying to find out how many hats they have in all, we have to put those two sets together. That means this is an addition problem.

TEACHER DO: Write 4 + 3 = ____ on the board.

TEACHER SAY: Who can tell me what 4 + 3 equals?

STUDENTS DO: Raise hands to answer question.

TEACHER DO: Using **Calling Sticks**, select a student to share the answer. Write the answer on the board.

TEACHER SAY: 4 + 3 = 7. Wave your hands if you got the right answer.

STUDENTS DO: Wave hands if they got the right answer.

TEACHER SAY: Great job adding today!

Share (5-10 mins)

Directions

1. TEACHER SAY: Turn to the next blank page in your math journal.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Choose one of the numbers we have been studying from 21 - 30. Write the number and draw a set of objects to match. You may draw balls, stars, balloons, hearts – whatever you like as long as you can draw it quickly.

STUDENTS DO: Choose a number from 21-30, write the number, and draw a set of objects to match the number in their journal.

TEACHER DO: Walk around room and offer help to students as needed. Give students 3 minutes to draw. Take note of students who may need additional practice.

2. TEACHER SAY: Share your drawing with your Shoulder Partner. Take turns sharing and counting each other's objects.

STUDENTS DO: Share drawings with partners and count the partner's objects.

TEACHER SAY: Nice work today!

Lesson 39 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count by ones and tens to 30
- Represent quantities with a number up to 30
- Add within 10 using pictures and objects
- Use addition within 10 to solve word problems

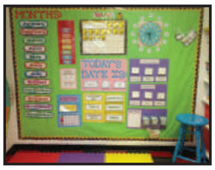
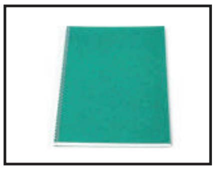
KEY VOCABULARY

- Addition (Add)
- Equal Sign (=)
- Plus
- Symbols

LESSON PREPARATION FOR THE TEACHER

- Gather sets of 10 small objects to use as counters (one set per student) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area		Math Journal	
Sets of 10 counters (one set per student)			

Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: Students, how many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: _____, select one of your classmates to tell us what month it is.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: The month is _______.

3. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: _____, select another colleague to tell us what day it is today.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: Today is ______.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

4. TEACHER DO: Have Calendar Helper point to today's date on the calendar.

TEACHER SAY: _____ is going to say today's date. Then you are going to repeat it.

STUDENTS DO: Calendar Helper says the date: Today is (day) the (number date) of (month) (year).

TEACHER DO: Help the Calendar Helper, as needed.

STUDENTS DO: Students repeat the date.

5. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Yesterday, there were 30 straws in the Tens pocket and 8 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 9. I'm going to count them. (Count the straws.) Now we have 39 straws. How many days have we been in school?

STUDENTS DO: Respond together: 39.

6. TEACHER SAY: My Calendar Helper will draw a circle around the number 39 on the number chart to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 39 on the number chart, then sits down.

TEACHER DO:______ drew a circle around the number 39 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know..

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Let's play a new counting game called 30 and Out. Here's how we play:**
- **In this game, everyone stands up and we go around the room, counting by 10's to 30.**
- **I will point to you when it is your turn.**
- **If I point to you, you have to say the number we are on – either 10, 20, or 30 – so pay attention!**
- **If you say 30, you have to sit down.**
- **We will play the game until everyone is sitting down.**

STUDENTS DO: Play 30 and Out, skip counting by 10's to 30 until all students are sitting.

2. **TEACHER SAY: Today we are going to continue to practice adding within 10, but this time you are going to work by yourself. When you are done, you and your Shoulder Partner can check each other's work, but you are solving the problems by yourselves.**

TEACHER DO: Hand out bags of counting objects to each student.

3. **TEACHER SAY: I am going to write an addition problem on the board. The first problem is 9 + 1 = ___.**

Note for the Teacher: Keep all of the math problems up on the board for the Share section. Do not erase as you go.

TEACHER DO: Write 9 + 1 = ____ on the board.

STUDENTS DO: Use counting objects to solve the problems.

TEACHER SAY: Who can tell me what 9 + 1 equals?

TEACHER DO: Using **Calling Sticks**, select a student to share answer. Write the answer on the board.

TEACHER SAY: 9 + 1 = 10.

4. **TEACHER SAY: Let's try 4 + 6 = ___.**

TEACHER DO: Write 4 + 6 = ____ on the board.

STUDENTS DO: Use counting objects to solve the problems.

TEACHER SAY: Who can tell me what 4 + 6 equals?

TEACHER DO: Using **Calling Sticks**, select a student to share answer. Write the answer on the board.

TEACHER SAY: 4 + 6 = 10.

5. **TEACHER SAY: Next problem: Find the answer for 3 + 7 = ___.**

TEACHER DO: Write 3 + 7 = ____ on the board.

STUDENTS DO: Use counting objects to solve the problems.

TEACHER SAY: Who can tell me what 3 + 7 equals?

TEACHER DO: Using **Calling Sticks**, select a student to share answer. Write the answer on the board.

TEACHER SAY: 3 + 7 = 10.

6. TEACHER SAY: **Let's try another. What is 8 + 2 = _____?**

TEACHER DO: Write 8 + 2 = ____ on the board.

STUDENTS DO: Use counting objects to solve the problems.

TEACHER SAY: **Who can tell me what 8 + 2 equals?**

TEACHER DO: Using **Calling Sticks**, select a student to share answer. Write the answer on the board.

TEACHER SAY: **8 + 2 = 10. Great job! Please put your counting objects away and I will collect them.**

STUDENTS DO: Clean up counting objects.

Share (5-10 mins)

Directions

1. TEACHER SAY: **For sharing time today, I would like for you and your Shoulder Partner to discuss what you notice about all of the addition problems we just did. How are they the same? How are they different? What do you think about them?**

STUDENTS DO: Discuss what they notice about the addition problems with their partners.

TEACHER DO: Walk around the room and listen to the students talk to their partners. Give students 3 minutes to talk to their Shoulder Partners. Then, using **Calling Sticks**, students to share their thinking with the class.

STUDENTS DO: Share their thinking with the class. Students should note that the sets they made were all different, but the answers to all of the addition problems was 10.

Lesson 40 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Classify objects by shape, size, and color
- Count by ones and tens to 30
- Write numbers 1-30
- Add within 10 using pictures and objects
- Use addition within 10 to solve word problems

KEY VOCABULARY

- Addition (Add)
- Classify
- Equal Sign (=)
- Plus
- Story problem
- Symbols

LESSON PREPARATION FOR THE TEACHER

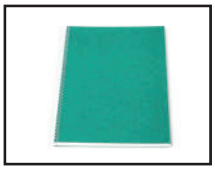
- Draw, color, and cut out 1 small red circle, 1 large blue circle, 1 medium yellow circle, 1 large red triangle, 1 medium blue triangle, 1 small yellow triangles, 1 medium red square, 1 small blue square, and 1 large yellow square for the classification activity.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Red, Blue, Yellow. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Small, Medium, Large. You will display these during the lesson after students have identified the categories for classification.
- Have tape available. Students will attach shapes to the labeled papers.
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area



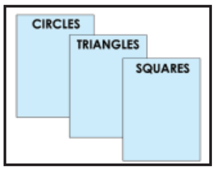
Math Journal



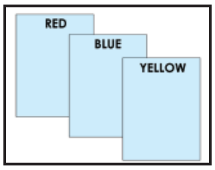
Sets of 10 counters (one set per pair of students)



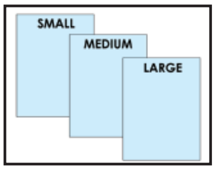
3 sheets of paper, labeled Circles, Triangles, Squares



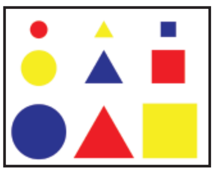
3 sheets of paper, labeled Red, Blue, Yellow



3 sheets of paper, labeled Small, Medium, Large



1 small red circle, 1 large blue circle, 1 medium yellow circle, 1 large red triangle, 1 medium blue triangle, 1 small yellow triangles, 1 medium red square, 1 small blue square, and 1 large yellow square



Calendar (15-20 mins)

Directions

1. TEACHER DO: Choose one student to be your Calendar Helper for the day. They will lead the class in saying the months of the year, days of the week, and counting.

2. TEACHER SAY: Students, how many months are in a year?

STUDENTS DO: Respond to question together: There are 12 months in a year.

TEACHER SAY: ______ is going to lead us in saying the months of the year.

STUDENTS DO: Calendar Helper stands at the calendar and leads the other students in saying the months of the year. Colleagues say the months of the year along with the Calendar Helper.

TEACHER SAY: _____, select one of your classmates to tell us what month it is.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: The month is ______.

3. TEACHER SAY: Now I would like for ______ to lead us in saying the days of the week together.

STUDENTS DO: Say the days of the week with the Calendar Helper.

TEACHER SAY: _____, select another colleague to tell us what day it is today.

STUDENTS DO: Calendar Helper selects a colleague to identify the current month. Selected student says: Today is ______.

TEACHER SAY: If today is ________. What was yesterday?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

TEACHER SAY: If today is ________. What will tomorrow be?

TEACHER DO: Have Calendar Helper use **Calling Sticks** to select a student to answer.

STUDENTS DO: Selected student answers.

4. TEACHER DO: Have Calendar Helper point to today's date on the calendar.

TEACHER SAY: _____ is going to say today's date. Then you are going to repeat it.

STUDENTS DO: Calendar Helper says the date: Today is day (day of the week), the (number date) of (month) (year).

TEACHER DO: Help the Calendar Helper, as needed.

STUDENTS DO: Repeat the date.

5. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and places it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket?

Yesterday, there were 30 straws in the Tens pocket and 9 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 10.

Wait! We have a rule about how many straws can fit in the Ones pocket. Who remembers what the rule is?

TEACHER DO: Call on students with raised hands.

STUDENTS DO: Explain: Only 9 straws can fit in the Ones pocket. When we get to 10 straws, they have to be bundled and moved to the Tens pocket.

6. TEACHER SAY: My Calendar Helper is going to bundle the straws and move them over to the Tens pocket.

STUDENTS DO: Observe as Calendar Helper bundles the straws and puts them in the Tens pocket.

TEACHER SAY: Now I can count them. How many straws are in each of these bundles?

TEACHER DO: Take bundles of straws out and show them to students.

STUDENTS DO: Raise hands to answer the question. Selected students answer the question.

TEACHER SAY: There are 10 straws in each bundle. That reminds me of our ten frames. The bundles have 10. The ten frames have 10. That gives me an idea about how I can count them! Does anybody know what I'm thinking?

STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

TEACHER SAY: I know I can count by 10's because we did it on our ten frames and on our number chart. These bundles are 10's, too. I can count them by 10's! Help me count: 10, 20, 30…

STUDENTS DO: Count aloud by 10's with the teacher to 30.

TEACHER SAY: What number comes after 30 if we're counting by 10's? It's 40! We have been in school for 40 days. How many days have we been in school?

STUDENTS DO: Respond together: 40.

7. TEACHER SAY: My Calendar Helper will draw a circle around the number 40 on the number chart to show how many days we have been in school. Let's see where the 40 is on the number chart.

STUDENTS DO: Calendar Helper circles 40 on the number chart, then sits down.

TEACHER DO:______ drew a circle around the number 40 on the number chart. Notice that 40 is in the same column as 10, 20, and 30! Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

8. TEACHER SAY: The last time we sorted objects, we sorted them by shape and size. Before that, we sorted objects by shape and color. You are so good at sorting that today I have a real challenge for you! I have some new objects for you to sort. I'm going to show them to you and I want you to think about how you want to sort them. Don't say anything yet! Just think.

TEACHER DO: Take out the shapes and display them so students can see them. Give students 30-60 seconds to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: Raise your hand if you think you know how the shapes could be sorted.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking. Call on several students. Ask questions to help guide their thinking until they have identified shape, color, and size as categories for sorting.

TEACHER SAY: Can we sort these shapes in more than one way?

STUDENTS DO: Respond together: Yes.

TEACHER SAY: Yes, we can sort them by shape, size, or color. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper.

TEACHER DO: Display the three shape papers. Use Calling Sticks to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, take the shapes back down and display the size papers. Review the meanings of small, medium, and large. Repeat the sorting steps to have students sort the shapes by size.

STUDENTS DO: When called on, take a shape and tape it to the correct size paper.

TEACHER DO: When all shapes have been sorted by size, take the shapes back down and display the color papers. Repeat the sorting steps to have students sort the shapes by color.

STUDENTS DO: When called on, take a shape and tape it to the correct color paper.

TEACHER SAY: You really are all amazing sorters! Nice work!

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Let's play 30 and Out again, too. Here's how we play:**
   - In this game, everyone stands up and we go around the room, counting by 10's to 30.
   - I will point to you when it is your turn.
   - If I point to you, you have to say the number we are on – either 10, 20, or 30, so pay attention!
   - If you say 30, you have to sit down.
   - We will play the game until everyone is sitting down.

STUDENTS DO: Play 30 and Out, skip counting by 10's to 30 until all students are sitting.

TEACHER DO: If students are ready for a challenge, have them play 40 and Out, skip counting to 40 and sitting down.

2. TEACHER DO: Hand out math journals and ask students to open them to the next blank page.

TEACHER SAY: Now, let's practice writing our numbers again. This time, I want you to come up to the board and write numbers! When I call on you, come up and write the number I say. If you need help, I will help you! If you are sitting down, you will write the number in your journal.

TEACHER DO: Use Calling Sticks to call students to the board (or overhead projector). Do not put the sticks back in the cup so you do not repeat a name. Start with 1 and work up to 30.

STUDENTS DO: If called on, write the given number on the board. If seated, write the given number in the math journal. Write numbers 1-30.

Note for the Teacher: If your students are not ready to write all 30 numbers at once, have them work with their Shoulder Partners and take turns writing the numbers on a sheet of paper.

3. TEACHER SAY: **Open your math journals to the next blank page.**

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: **We are still practicing adding within 10. Today I am going to read a story problem to you. Each story has a problem for you to solve. We are going to draw the sets from the story in our math journal and use them to solve the problem. Ready for the first story?**

STUDENTS DO: Confirm they are ready.

4. TEACHER SAY: **Nour has 4 big fish. She also has 4 small fish. How many fish does she have in all? Let's draw the picture to match the story in our journal.**

TEACHER DO: Repeat the story as needed.

STUDENTS DO: Draw the sets in their math journals and solve the problem.

TEACHER DO: Using **Calling Sticks**, select a student to show their work on the board (or overhead projector).

STUDENTS DO: Selected student shows their work and solves the problem. Seated students check their work.

TEACHER SAY: **Yes, 4 big fish plus 4 small fish equals 8 fish in all.**

5. TEACHER SAY: **Next problem: On his way to school, Mahmoud saw 5 big fluffy clouds in the sky. On his way home from school, Mahmoud then saw 2 big fluffy clouds. How many big fluffy clouds did Mahmoud see all together? Let's draw the picture to match the story in our journal.**

TEACHER DO: Repeat the story as needed.

STUDENTS DO: Draw the sets in their math journals and solve the problem.

TEACHER DO: Using **Calling Sticks**, select a student to show their work on the board (or overhead projector).

STUDENTS DO: Selected student shows their work and solves the problem. Seated students check their work.

TEACHER SAY: **Yes, 5 big fluffy clouds plus 2 big fluffy clouds equals 7 clouds all together. Great job solving our addition problems. Next time, I am going to teach you a strategy that will help you add more quickly.**

Share (5-10 mins)

Directions

1. TEACHER SAY: **What is your favorite counting game to play? Can you think of any other counting games we should play together? Talk to your Shoulder Partner about your ideas.**

STUDENTS DO: Talk to their shoulder partners about their favorite games and any new game ideas they have.

TEACHER SAY: **Raise your hand if you'd like to share your thinking.**

STUDENTS DO: Raise their hands to volunteer. Selected students share their thinking with the class.

TEACHER DO: Take note of counting games students suggest. Incorporate them in future lessons, if possible.

PRIMARY 1

Mathematics

Chapter 6

Lessons 41-50

Overview

Lessons 41-50

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout days 41-50, students work toward the following learning indicators::

COUNTING AND CARDINALITY :

- Count by ones and tens to 100
- Read and write numerals from 0 to 100
- Understand the relationship between numbers and quantities up to 100
- Write numbers and represent quantities with a number to 100
- Apply the Ten-Frame structure as another way to represent quantities in familiar grouping

OPERATIONS AND ALGEBRAIC THINKING:

- Add and subtract within 20 using strategies such as: Counting on
- Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false
- Fluently add and subtract within 10
- Use addition and subtraction within 20 to solve word problems with unknowns in all positions

NUMBERS AND OPERATIONS IN BASE TEN:

- Compare numbers 0-20, using symbols >, =, and <

CH 6 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
41	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 32 • Read and write numerals up to 32 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings
42	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 34 • Read and write numerals up to 34 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings
43	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 35 • Read and write numerals up to 35 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings
44	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 37 • Read and write numerals up to 37 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Apply strategies to find the difference between two numbers
45	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 39 • Read and write numerals up to 39 • Demonstrate understanding of the relationship between numbers and quantities up to 39 • Apply the ten-frame structure as a way to represent quantities • Apply strategies to find the difference between two numbers
46	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 40 • Read and write numerals up to 40 • Apply the ten-frame structure as a way to represent quantities • Apply understanding of counting and quantity to play math games and activities

LESSON	INSTRUCTIONAL FOCUS
47	**Students will:** • Participate in Calendar Math activities • Compare numbers 0-20, using symbols >, =, and < • Count by ones and tens to 40 • Read and write numerals from 0-40 • Apply strategies to solve subtraction problems
48	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Apply strategies to solve addition and subtraction problems
49	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Solve addition problems to create fact families • Identify patterns in fact families
50	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Solve addition problems to create fact families • Identify patterns in fact families

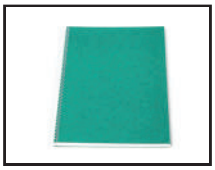
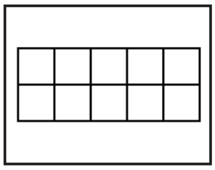
Chapter Preparation for the Teacher

- In Lesson 46, students will celebrate counting to 40 by playing games and doing activities in which they practice counting by 1s and 10s to 40. Preview the lesson and familiarize yourself with the games and activities to decide which ones you would like to do. Gather the materials you will need for each in advance. The materials you need are included in the game descriptions.

Lesson 41 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens up to 32 • Read and write numerals up to 32 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings	• Addition (Add) • Equals (=) • Greater than • Less than • Minus (-) • Subtraction (Subtract) • Symbols • Ten frame	• Create or print out 4 ten frames for Learn segment. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area		Math Journal	
Sets of 10 counters (one set per pair of students)		Four Ten Frames	

Calendar (15-20 mins)

Directions

1. TEACHER SAY: It is time for calendar! I am going to call a student up to help me teach Calendar time.

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, ______ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 40 straws – or 4 groups – in the Tens pocket and 0 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there is 1. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 4 sets of tens now! Count with me if you know how.

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straw: 41.

TEACHER SAY: Now we have 41 straws. What does that tell us?

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 41 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 41 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 41 on the number chart and sits down.

TEACHER SAY: ______ drew a circle around the number 41 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

3. TEACHER DO: Review greater than, less than, equal to.

TEACHER SAY: Who can tell us what greater than means and show us the symbol using their arms?

STUDENTS DO: Raise hands to volunteer. Selected student answers the question and shows the greater than symbol using their arms.

TEACHER DO: Repeat the process for less than and equal to.

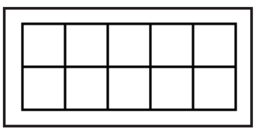
STUDENTS DO: Selected students explain less than and equal to and show the symbols using their arms.

TEACHER SAY: Great job! We'll practice more during our next math lesson.

Learn (25-30 mins)

Directions

1. TEACHER SAY: We have been working so hard to learn our numbers. So far, we have learned to count, write, and order numbers from 1-30. Let's keep going! Like we have done in the past, each day we will have 1 or 2 special numbers of the day. Our special numbers today are 31 and 32. We will be writing and counting these numbers, but first, who can tell me what this is?



TEACHER DO: Show the students one of the blank ten frames.

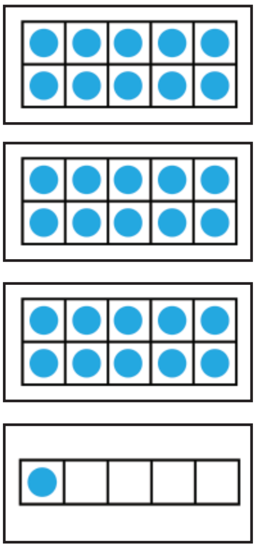
STUDENTS DO: Raise hand to respond. Selected student will answer: It is a ten frame.

TEACHER SAY: Right. This is called a ten frame. Remember, a ten frame helps us organize our numbers and count numbers more quickly. When we see a full ten frame, we don't have to

count each of the dots or ones in it, we know there are ten. So if my ten frame is full, how many ones do we have?**

STUDENTS DO: Respond together: 10 ones.

2. TEACHER SAY: That is correct! A ten frame holds up to 10 ones. Let's draw our number 31 using our ten frames. We will need four ten frames to draw the number 31. Watch me draw the dots and count aloud as I draw.



TEACHER DO: Draw 31 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 31 dots on the ten frames.

TEACHER SAY: We have 31 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: And how many extra ones do we have?

STUDENTS DO: Respond together: 1.

3. TEACHER SAY: Right! So the number 31 is 3 sets of ten and 1 extra one. We can count it by 10's and 1 more. Watch as I count.

TEACHER DO: Point to the ten frames as you count 10, 20, 30, and 1 is 31.

STUDENTS DO: Observe as the teacher counts.

4. TEACHER DO: Write the number 31 on the chalkboard (or somewhere all students can see it). Hand out math journals and have students open to the next blank page.

STUDENTS DO: Open journals to the next blank page.

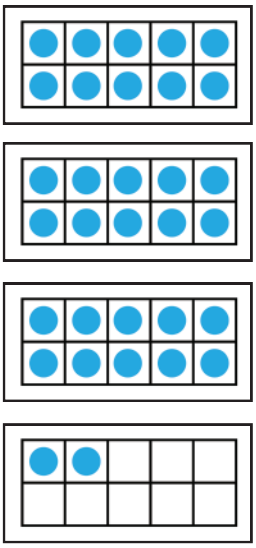
TEACHER SAY: The number 31 has two digits or numbers. When we write it, we start with a 3 (for our sets of tens) and then right next to it write a 1 (for our extra one). A 3 and a 1. Let's Skywrite the number 31 three times.

STUDENTS DO: Stand and skywrite the number 31 three times.

TEACHER SAY: Let's practice writing 31 in our journals now. Write the number 31 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 31 in their journals and check their partner's work.

2. TEACHER SAY: Great job! Our next special number comes after 31. It is 32. 32 is also a two-digit number. Let's draw it on our ten frames. Count with me as I draw the dots.



TEACHER DO: Draw 32 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 32 dots on the ten frames.

TEACHER SAY: We have 32 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: And how many extra ones do we have?

STUDENTS DO: Respond together: 2.

TEACHER DO: Select a student with hand raised to answer.

TEACHER SAY: Right! So the number 32 is 3 sets of ten and 2 extra ones. We can count it by 10's and 2 more. Watch as I count.

TEACHER DO: Point to the ten frames as you count 10, 20, 30, and 1, 2 is 32.

STUDENTS DO: Observe as the teacher counts.

5. TEACHER DO: Write the number 32 on the chalkboard (or somewhere all students can see it).

TEACHER SAY: The number 32 has two digits or numbers. When we write it, we start with a 3 (for our sets of tens) and then right next to it write a 2 (for our extra ones). A 3 and a 2. Let's Skywrite the number 32 three times.

STUDENTS DO: Stand and skywrite the number 32 three times.

TEACHER SAY: Let's practice writing 32 in our journals now. Write the number 32 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 32 in their journals and check their partner's work.

3. TEACHER SAY: You are getting so good at learning new numbers every day! We will learn more this week, but now let's try something new. I am going to hand out bags of 10 counting objects. You will work with your Shoulder Partner for this activity.

TEACHER DO: Hand out bags of items to each pair of partners.

TEACHER SAY: Last week we learned about addition. Today, we are going to learn about subtraction. Everybody say "subtraction" with me.

STUDENTS DO: Repeat the word with the teacher: Subtraction.

TEACHER SAY: When we add, we put two sets together to find out how much we have all together. When we subtract, we start with a set and take it apart, taking some away to figure out how much is left. Let's try subtracting with our Shoulder Partners and our bag of objects. With your partner, I want you to make a set of 8 objects. I am going to draw 8 circles on the board.

STUDENTS DO: Work with their Shoulder Partners to create a set of 8 objects.

TEACHER DO: Draw a set of 8 on the board.

4. TEACHER SAY: When we subtract, we take the set apart, taking some away. We are going to subtract - or take away - 3 from our set of 8. On the board, I am going to show subtraction by crossing out 3 circles, taking them away from the set of 8. You do the same thing in your math journal.

TEACHER DO: Cross out 3 of the 8 circles on the board.

STUDENTS DO: Cross out 3 objects from their set.

TEACHER SAY: So we had 8 and took away, or subtracted, 3. Now, I want to know how many objects we have left. What can we do to find this out?

STUDENTS DO: Raise hand to respond. Selected student answers the question: Count the objects that are left in the set.

TEACHER SAY: Yes! We need to count the objects that are still in the set. How many objects are left in the set? Count!

STUDENTS DO: Count all of the objects left.

TEACHER DO: Using **Calling Sticks**, select students to answer until one correctly answers: 5.

TEACHER SAY: That's correct, 5! You have 5 left in your set and I have 5 on the board that are not crossed out. So we can say, "Eight minus three equals five." We write the math problem like this: 8 – 3 = 5.

TEACHER DO: Write 8 – 3 = 5 on the board.

TEACHER SAY: Now you say it: 8 – 3 = 5.

STUDENTS DO: Repeat the problem aloud.

5. TEACHER SAY: I see two symbols in this problem that we need to look at. One of them you know, and one is new. The new symbol comes first.

TEACHER DO: Point to the minus sign in the problem or draw another minus sign on the board.

TEACHER SAY: This symbol is called a minus sign. We use the minus sign when we subtract numbers, like we just did when we took away three objects. Let's all say minus sign.

STUDENTS DO: Repeat minus sign.

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

TEACHER SAY: Do you remember the other symbol from last week? What do we call this symbol?

STUDENTS DO: Answer together: equal sign.

TEACHER SAY: Good job! It's an equal sign, and we use it to show that what is on its left and right are worth the same amount.

Note to the Teacher: If time allows, do another practice problem. Make up a story problem to help students practice subtracting within 10. Follow the same procedure to guide students through drawing the problem and thinking about the process and meaning of subtraction.

TEACHER SAY: Wonderful job! Go ahead and put all of your objects in the bag. We will keep practicing subtracting tomorrow.

Share (5 mins)

Directions

1. TEACHER SAY: Let's get out our math journals. Look through your journal at all of the numbers you have been learning about. Do you have any questions about them? What have you noticed about the numbers? What have you been thinking about them? Let's talk to each other about our thinking.

TEACHER DO: Allow 1-2 minutes for students to think about what they would like to ask or share. Then, call on students with raised hands.

STUDENTS DO: Think about what they would like to share, then raise hands to volunteer. Selected students share their questions and ideas.

TEACHER DO: Take note of students' questions and ideas. This will help inform you as to who is excelling at learning numbers and who may need additional support. Thank all students who share.

Lesson 42 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count by ones and tens up to 34
- Read and write numerals up to 34
- Demonstrate understanding of the relationship between numbers and quantities up to 32
- Apply the ten-frame structure as a way to represent quantities
- Subtract within 10 using objects and drawings

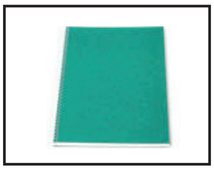
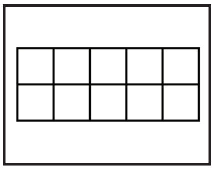
KEY VOCABULARY

- Addition (Add)
- Equals (=)
- Greater than
- Less than
- Minus (-)
- Story problem
- Subtraction (Subtract)
- Symbols
- Ten frame

LESSON PREPARATION FOR THE TEACHER

- Create or print out 4 ten frames for Learn segment.
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Area		Math Journal	
Sets of 10 counters (one set per pair of students)		Four Ten Frames	

Calendar (15-20 mins)

Directions

1. TEACHER SAY: It is time for calendar! I am going to call a student up to help me teach Calendar time.

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper takes 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 40 straws in the Tens pocket and 1 straw in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 2. I'm going to count them. (Count the straws.) Now we have 42 straws. What does that tell us?

STUDENTS DO: Raise hands to respond. Selected student answers: We have been in school 42 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 42 to show how many days we have been in school.

STUDENTS DO: The Calendar Helper circles 42 on the number chart and sits down.

TEACHER SAY: ______ drew a circle around the number 42 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 42, saying the numbers they know and listening to the teacher say the numbers they don't know.

3. TEACHER SAY: Yesterday, we reviewed greater than, less than, and equal to. Let's practice a little. I'm going to call some of you up to help us review.

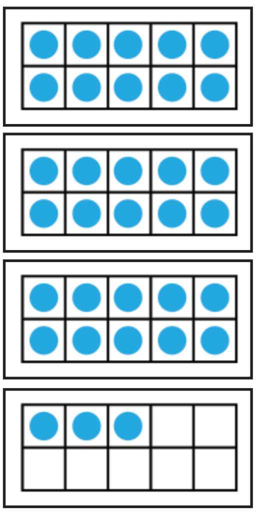
TEACHER DO: Call volunteers up to hold up fingers to show numbers as follows:

- Practice #1: Student 1 holds up 8 fingers. Student 2 holds up 3 fingers. Ask for a volunteer to stand between the two students and use their arms to show greater than, less than, or equal to.
- Practice #2: Student 1 holds up 4 fingers. Student 2 holds up 4 fingers. Volunteer uses their arms to show greater than, less than, or equal to.
- Practice #3: Student 1 holds up 3 fingers. Student 2 holds up 6 fingers. Volunteer uses their arms to show greater than, less than, or equal to.

STUDENTS DO: Participate in greater than, less than, equal to review by modeling problems and/or using arms to show the correct symbols.

Learn (25-30 mins)

Directions



1. TEACHER SAY: Today we have two new numbers to learn! These two numbers come after 32. Does anyone know what numbers they are? How do you know?

STUDENTS DO: Raise hands to respond. Selected students answer the question and explain their thinking.

TEACHER SAY: Let's show 33 using our ten frames. Watch me draw the dots and count aloud as I draw.

TEACHER DO: Draw 33 dots in the ten frames as you count aloud.

STUDENTS DO: Count aloud as the teacher draws 33 dots on the ten frames.

TEACHER SAY: We have 33 dots on our ten frames. How many of our ten frames are full?

TEACHER DO: Using **Calling Sticks**, select a student to answer.

TEACHER SAY: How many extra ones do we have?

STUDENTS DO: Respond together: 3.

TEACHER SAY: Right! So the number 33 has 3 sets of ten and 3 extra ones.

2. TEACHER DO: Write 33 on the board. Hand out math journals and ask students to open them to the next blank page.

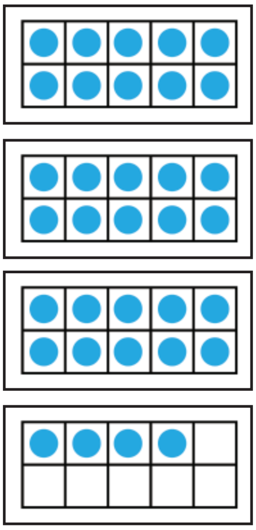
TEACHER SAY: The number 33 has two digits, or numbers. When we write it, we start with a 3 (for our sets of tens) and a 3 (for our extra ones). Let's Skywrite the number 33 three times.

STUDENTS DO: Stand and **Skywrite** the number 33 three times.

TEACHER SAY: Let's practice writing 33 in our journals now. Write the number 33 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 33 in their journals and check their partner's work.

4. TEACHER SAY: Great job! Now, let's look at the number 34. 34 is our second new number today. 34 is also a two-digit number. Let's show it using our ten frames. Count with me as I draw the dots.



TEACHER DO: Draw 34 dots in the ten frames, counting aloud as you draw.

STUDENTS DO: Count aloud as the teacher draws 34 dots on the ten frames.

TEACHER SAY: Now, we have 34 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: And how many extra ones do we have?

STUDENTS DO: Respond together: 4.

TEACHER SAY: Right! So the number 34 is 3 sets of ten and 4 extra ones.

TEACHER DO: Write the number 34 on the board.

TEACHER SAY: We write the number 34 with a 3 and a 4 right beside it. Now, let's practice Skywriting the number 34 three times!

STUDENTS DO: Stand and **Skywrite** the number 34 three times.

TEACHER SAY: Now, write the number 34 three times in your math journal. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 34 in their journals and check their partner's work. Keep math journals out.

5. TEACHER SAY: Wonderful! We learned to do something new in math yesterday. Who remembers what it was?

STUDENTS DO: Raise hands to respond. Selected students answer the question: subtract (or take away).

TEACHER SAY: Yes, we learned how to subtract. Remember, when we subtract, we take some away from a set. Let's practice some more. Open your math journal to the next blank page.

STUDENTS DO: Open journals to the next blank page.

6. TEACHER SAY: I am going to read a story to you. We have done story problems in the past, but we were adding numbers together. Now, we will hear some story problems that want us to subtract, or take some away. Listen for clues that tell us we need to take away. Are you ready?

STUDENTS DO: Confirm they are ready.

TEACHER SAY: Tarek has 7 toy trucks. He gave 3 to his little brother. How many trucks does Tarek have left? Do you hear any words that give us a clue that we're going to take away instead of add together?

STUDENTS DO: Listen to the word problem. Try to identify clues that they should subtract instead of add.

TEACHER DO: If necessary, explain that Tarek has trucks and gives some away. That is a clue that we are subtracting – or taking away – to find out how many he has left. Read the problem aloud again.

TEACHER SAY: Tarek has 7 toy trucks. He gave 3 to his little brother. How many trucks does Tarek have left? Let's draw the problem. What should we draw? How many should we draw?

STUDENTS DO: Raise hands to respond. Selected students answer the question: 7 trucks.

TEACHER SAY: Yes! Tarek had 7 toy trucks. We need to draw a set of 7 trucks in our math journals. Since trucks take a long time to draw, let's draw circles instead. You draw them in your journal as I draw them on the board.

TEACHER DO: Draw 7 circles on the board.

STUDENTS DO: Draw 7 circles in their math journals.

TEACHER SAY: How many toy trucks did Tarek give to his little brother?

STUDENTS DO: Respond together: 3.

TEACHER SAY: That's right, 3! And since Tarek gave away the trucks, we need to subtract – or take away – 3 trucks. How can we show that we are subtracting 3 trucks?

STUDENTS DO: Raise hands to respond. Selected students answer the question: Cross out 3 circles.

TEACHER SAY: Yes! Let's cross out 3 circles.

TEACHER DO: Cross out 3 of the circles on the board.

STUDENTS DO: Cross out 3 of the circles in their math journals.

TEACHER SAY: We had a set of 7 and we crossed out or took 3 of them away. Now we need to find out how many toy trucks Tarek has left. What do we need to do? How do you know?

STUDENTS DO: Raise hands to respond. Selected student answers the question: Count the circles that are left.

7. **TEACHER SAY: Let's count the trucks – or circles – that are left. How many are there?**

STUDENTS DO: Count and raise hands to respond: 4.

TEACHER DO: Select a student with hand raised to answer.

TEACHER SAY: That's correct! Tarek has 4 toy trucks left. We can say, "Seven minus three equals four." We can write that subtraction problem like this. Read it with me, then write it in your journal.

TEACHER DO: Write 7 – 3 = 4 on the board and read it aloud.

STUDENTS DO: Read the problem aloud with the teacher, then write 7 – 3 = 4 in their math journals.

8. TEACHER SAY: Do you remember the names of the two symbols we just wrote?

TEACHER DO: Point to the minus sign in the problem or draw another minus sign on the board.

TEACHER SAY: What do we call this sign? (-)

STUDENTS DO: Respond together: minus sign.

TEACHER SAY: That's right! And we use the minus sign when we subtract and take some away from a set. What do we call this sign? (=)

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Respond together: equal sign.

TEACHER SAY: That's right, and we use the equal sign in subtraction problems to tell us how many we have left.

Note to the Teacher: If time allows, do another practice problem. Make up a story problem to help students practice subtracting within 10. Follow the same procedure to guide students through drawing the problem and thinking about the process and meaning of subtraction.

TEACHER SAY: Wonderful job! Go ahead and put all of your objects in the bag. We will keep practicing subtracting tomorrow.

Share (5-10 mins)

Directions

1. TEACHER SAY: Let's turn to the next blank page in our math journals.

STUDENTS DO: Turn to the next blank page in their math journals.

TEACHER SAY: I would like for you to work with your Shoulder Partner to draw your own subtraction problem. Decide how many you will start with and how many you will take away.

STUDENTS DO: Work with Shoulder Partners to draw their own subtraction problem.

TEACHER DO: Walk around the room and observe students for 2 minutes while the students draw. It is okay if students still need support with this skill. This activity gives you an opportunity to see who is building understanding and who has misconceptions about subtraction.

TEACHER SAY: Who would like to share their subtraction drawings?

STUDENTS DO: Raise hands to volunteer. Selected partners share their subtraction drawings.

Lesson 43 Overview

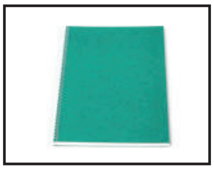
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens up to 35 • Read and write numerals up to 35 • Demonstrate understanding of the relationship between numbers and quantities up to 32 • Apply the ten-frame structure as a way to represent quantities • Subtract within 10 using objects and drawings	• Equals (=) • Greater than • Less than • Minus (-) • Subtraction (Subtract) • Symbols	• Create or print out 4 ten frames for Learn segment. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area



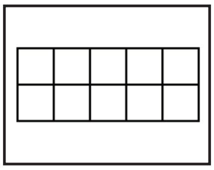
Math Journal



Sets of 10 counters (one set per pair of students)



Four Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 40 straws in the Tens pocket and 2 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 3. I'm going to count them. (Count the straws.) Now we have 43 straws. What does that tell us?

TEACHER DO: Using **Calling Sticks**, select a student to share their thoughts.

STUDENTS DO: Selected student responds: We have been in school 43 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 43 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 43 on the number chart.

TEACHER SAY: ______ drew a circle around the number 42 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher, saying the numbers they know and listening to the teacher say the numbers they don't know.

3. TEACHER SAY: We have been reviewing greater than, less than, and equal to. Let's practice a few more problems together. You're going to help!

TEACHER DO: Call volunteers up to hold up fingers to show numbers as follows:

- Practice #1: Student 1 holds up 7 fingers. Student 2 holds up 7 fingers. Ask for a volunteer to stand between the two students and use their arms to show greater than, less than, or equal to.
- Practice #2: Student 1 holds up 4 fingers. Student 2 holds up 5 fingers. Volunteer uses their arms to show greater than, less than, or equal to.
- Practice #3: Student 1 holds up 10 fingers. Student 2 holds up 5 fingers. Volunteer uses their arms to show greater than, less than, or equal to.

3. STUDENTS DO: Participate in greater than, less than, equal to review by modeling problems and/or using arms to show the correct symbols.

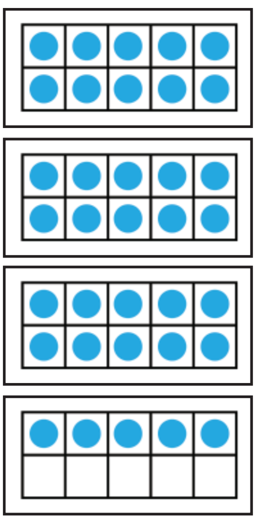
Learn (25-30 mins)

Directions

1. TEACHER SAY: Today we only have one new number, does anyone want to guess which number it is?

TEACHER DO: Using **Calling Sticks**, select a student to share their answer.

STUDENTS DO: Selected student answers the question.



TEACHER SAY: Yes - 35! It comes right after 34. Let's show how much 35 is using our ten frames. We will need four ten frames to draw the number 35. Watch me draw the dots and count aloud as I draw.

TEACHER DO: Draw 35 dots in the ten frames, counting aloud as you draw.

STUDENTS DO: Count aloud as the teacher draws 35 dots on the ten frames.

TEACHER SAY: We have 35 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: And how many extra ones do we have?

STUDENTS DO: Respond together: 5.

TEACHER SAY: Right! So the number 35 is 3 sets of ten and 5 extra ones. Do you remember how to count by our ten frames? We know that one ten frame is 10. Who remembers what 2 full ten frames is?

TEACHER DO: Using **Calling Sticks**, select students to answer until one correctly answers 20.

STUDENTS DO: Selected students answer the question.

TEACHER SAY: That's right! One full ten frame is 10, two full ten frames is 20. Now, what number is three full ten frames?

TEACHER DO: Using **Calling Sticks**, select students to answer until one correctly answers 30 (or you tell them the answer is 30).

STUDENTS DO: Selected students answer the question.

TEACHER SAY: Great! Can we count by tens and then ones to get to 35? Count with me.

TEACHER DO: With your hands, circle around the 3 ten frames while counting aloud by tens (10, 20, 30). Point to each of the 5 extra ones while counting aloud 31, 32, 33, 34, 35.

STUDENTS DO: Count aloud with teacher by tens then ones to 35.

2. TEACHER DO: Write the number 35 on the board and hand out math journals. Have students open them to the next blank page.

TEACHER SAY: The number 35 has two digits or numbers. When we write it, we start with a 3 (for our sets of tens) and then right next to it write a 5 (for our extra ones). Let's Skywrite the number 35. Put your pointer finger in the air and write a 3 and then a 5. Let's sky write 35 three times.

STUDENTS DO: Stand and **Skywrite** the number 35 three times.

TEACHER SAY: Let's practice writing 35 in our journals now. Write the number 35 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 35 in their journals and check their partner's work.

3. TEACHER SAY: Great job! Now I am going to hand out bags of 10 counting objects so that we can practice subtracting. You will work with your Shoulder Partner for this activity.

TEACHER DO: Hand out bags of items to each pair of partners.

TEACHER SAY: The past few days we have been learning how to subtract. Who can remind us what subtracting means?

STUDENTS DO: Raise hands to answer.

TEACHER DO: Select a student with hand raised to answer.

TEACHER SAY: Good memory! When we subtract, we take some away from a set. Let's try subtracting with our Shoulder Partners and our bag of objects. Take a look at this problem: 9 – 7 = ______. We're going to solve it using our counting objects. How many objects should we start with? Talk about it with your Shoulder Partner.

STUDENTS DO: Talk to their shoulder partners about how much they should start with.

TEACHER DO: Using **Calling Sticks**, select students to answer the question. If needed, ask questions and guide students' thinking to help them determine they need to start with 9 counting objects.

TEACHER SAY: With your partner, I want you to make a set of 9 objects. I am going to draw 9 circles on the board.

TEACHER DO: Draw a set of 9 on the board to model.

STUDENTS DO: Work with **Shoulder Partner** to create a set of 9 objects.

TEACHER SAY: Take another look at the problem. How many objects do we have to subtract to solve the problem? Talk about it with your Shoulder Partner.

TEACHER DO: Using **Calling Sticks**, select students to answer the question. If needed, ask questions and guide students' thinking to help them determine they need to subtract 7 objects.

TEACHER SAY: With your partner, subtract – or take away – 7 objects. I will subtract 7 circles from my set of 9.

TEACHER DO: Cross out 7 circles on the board.

STUDENTS DO: Work with **Shoulder Partner** to subtract 7 objects.

TEACHER SAY: So we had 9 and subtracted 7. Now, we need to know how many objects we have left. What should we do to find this out?

STUDENTS DO: Raise hands to respond. Selected students answer the question.

TEACHER SAY: Yes! We need to count the objects that are still in the set. How many objects are left in the set? Count and I will call on one of you to answer.

STUDENTS DO: Count all of the objects left and answer when called on by the teacher: 2.

TEACHER SAY: That's correct, 2! You have 2 left in your set and I have 2 on the board that are not crossed out. So we can say, "Nine minus seven equals two." We write the math problem like this.

TEACHER DO: Write 9 – 7 = 2 on the board.

TEACHER SAY: Read the problem aloud with me as I point to it.

STUDENTS DO: Read the problem aloud with the teacher.

4. TEACHER SAY: Does anyone remember what this symbol is called? (-) When do we use it?

TEACHER DO: Point to the minus sign in the problem or draw another minus sign on the board.

STUDENTS DO: Raise hand to answer. Selected student answers the questions.

TEACHER SAY: It's a minus sign! We use the minus sign when we subtract numbers, like we just did. Let's all say minus sign.

STUDENTS DO: Repeat together: minus sign.

TEACHER SAY: What do we call this symbol?

TEACHER DO: Point to the equal sign in the problem or draw another equal sign on the board.

STUDENTS DO: Raise hand to answer. Selected student answers the question.

TEACHER SAY: You are getting good at recognizing these symbols!

Note to the Teacher: If time allows, do another practice problem. Write a subtraction problem on the board and ask questions to make sure students understand how to read and solve the problem. As needed, guide students through creating object sets and thinking about the process and meaning of subtraction.

Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's think a little more about addition and subtraction. When do we use addition in our lives?**

STUDENTS DO: Raise hands to share their ideas.

TEACHER DO: Call on students with raised hands. If necessary, help students think of times when we use addition in our daily lives.

2. **TEACHER SAY: When do we use subtraction in our lives?**

STUDENTS DO: Raise hands to share their ideas.

TEACHER DO: Call on students with raised hands. If necessary, help students think of times when we use subtraction in our daily lives.

Lesson 44 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count by ones and tens up to 37
- Read and write numerals up to 37
- Demonstrate understanding of the relationship between numbers and quantities up to 32
- Apply the ten-frame structure as a way to represent quantities
- Apply strategies to find the difference between two numbers

KEY VOCABULARY

- Addition (Add)
- Counting on
- Difference
- Number line
- Strategy
- Subtraction (Subtract)

LESSON PREPARATION FOR THE TEACHER

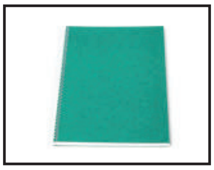
- Create or print out 4 ten frames for Learn segment.

MATERIALS

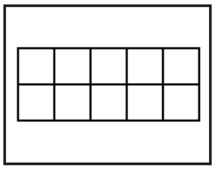
Calendar Math Area



Math Journal



Four Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **Let's find out how many straws are in the Ones pocket now, and how many are in the Tens pocket so we know how many days have we been in school. Yesterday, there were 40 straws in the Tens pocket and 3 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 4. I'm going to count them. (Count the straws.) Now we have 44 straws. We have been in school 44 days!**

Now my Calendar Helper will draw a circle around the number 44 to show how many days we have been in school.

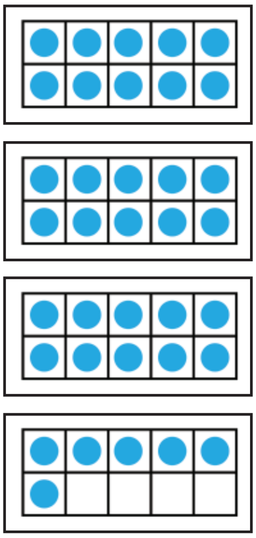
STUDENTS DO: Calendar Helper circles 44 on the number chart.

TEACHER SAY: **______ drew a circle around the number 44 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count along with the teacher to 44, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions



1. **TEACHER SAY:** **Today we have two new numbers to learn! These two numbers come after 35. Does anyone know what numbers they are? How do you know?**

STUDENTS DO: Raise hands to respond. Selected students answer the question and explain their thinking.

TEACHER SAY: **Let's show the first new number, 36, using our ten frames. Watch me draw the dots and count aloud as I draw.**

TEACHER DO: Draw 36 dots in the ten frames as you count aloud.

STUDENTS DO: Count aloud as the teacher draws 36 dots on the ten frames.

TEACHER SAY: **We have 36 dots on our ten frames. How many of our ten frames are full?**

STUDENTS DO: Respond together: 3.

TEACHER SAY: **How many extra ones do we have?**

STUDENTS DO: Respond together: 6.

TEACHER SAY: **Right! So the number 36 has 3 sets of ten and 6 extra ones.**

2. **TEACHER DO:** Write 36 on the board. Hand out math journals and ask students to open them to the next blank page.

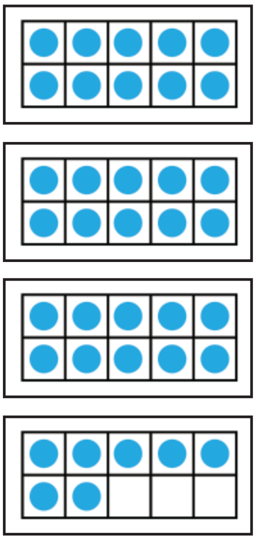
TEACHER SAY: **The number 36 has two digits, or numbers. When we write it, we start with a 3 (for our sets of tens) and a 6 (for our extra ones). Let's Skywrite the number 36 three times.**

STUDENTS DO: Stand and **Skywrite** the number 36 three times.

TEACHER SAY: **Let's practice writing 36 in our journals now. Write the number 36 three times. Then, check your Shoulder Partner's work.**

STUDENTS DO: Write 36 in their journals and check their partner's work.

3. **TEACHER SAY:** **Great job! Now, let's look at the number 37. 37 is our second new number today. 37 is also a two-digit number. Let's show how much 37 is using our ten frames. Count with me as I draw the dots.**



TEACHER DO: Draw 37 dots in the ten frames, counting aloud as you draw.

STUDENTS DO: Count aloud as the teacher draws 37 dots on the ten frames.

TEACHER SAY: Now, we have 37 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: How many extra ones do we have?

STUDENTS DO: Respond together: 7.

TEACHER SAY: Right! So the number 37 is 3 sets of ten and 7 extra ones.

TEACHER DO: Write the number 37 on the board.

TEACHER SAY: Great! We write the number 37 with a 3 and a 7 right beside it. Now, let's practice Skywriting the number 37 three times!

STUDENTS DO: Stand and **Skywrite** the number 37 three times.

TEACHER SAY: Let's practice writing 37 in our journals now. Write the number 37 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 37 in their journals and check their partner's work. Keep math journals out.

4. **TEACHER SAY: Wonderful! We have been learning about subtracting this week. We've been talking about subtraction as "taking away." We've been creating sets and then taking some away. But we can also think of subtraction as "finding the difference." Let's look at an example of what I mean.**

TEACHER DO: Call up 2 students to stand together in a group. Then, call up 3 students to stand together in a second group.

TEACHER SAY: How many are in the first group?

STUDENTS DO: Respond together: 2.

TEACHER SAY: How many are in the second group?

STUDENTS DO: Respond together: 3.

TEACHER SAY: What is the difference between the number of students in the first group and the number of students in the second group? How can we find the answer to that question? There is more than one way to solve the problem. Turn to your Shoulder Partner and talk about your ideas.

STUDENTS DO: Turn and talk to Shoulder Partners about their ideas for how to find the difference.

TEACHER SAY: Raise your hands if you think you know how to find the difference between the two groups.

STUDENTS DO: Raise hands to volunteer.

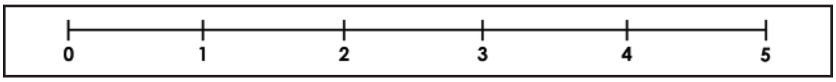
TEACHER DO: Call on students with hands raised and allow them to share their ideas. Engage them in a conversation about the mathematics. Students may share the answer, but should explain how they got the answer. Some students may just "know," but have to tell how they know. Other students may count up from 2 to 3. Others may subtract 3-2. Possible misconceptions: 2 + 3; 2 – 3.

STUDENTS DO: Share their ideas. Show and explain their thinking. Ask questions. Change their minds. Help each other.

TEACHER DO: If some students understand how to solve the problem, make sure they explain it in their own words to their classmates. If students are unable to answer or explain, use a number line to show them one way to think about the problem:

TEACHER SAY: Let's think about this problem by looking at a number line.

TEACHER DO: Draw or display a number line from 0-5 on the board (or somewhere all students can see).



TEACHER SAY: How many students are in the first group?

STUDENTS DO: Respond together: 2.

TEACHER SAY: I'm going to draw a circle at 2 on the number line for the first group. How many students are in the second group?

STUDENTS DO: Respond together: 3.

TEACHER SAY: I'm going to draw a square at 3 on the number line for the second group. Help me count up from 2 to 3. How many jumps do I have to make on the number line to get from 2 to 3?

STUDENTS DO: Raise hands to respond. Selected student answers the question: 1.

TEACHER SAY: Right, we only have to make 1 jump to get from 2 to 3. The difference between 2 and 3 is 1. The difference between the number of students in group 1 and the number of students in group 2 is 1. Let's try another one.

TEACHER DO: Call on 2 new students to stand together in a group. Then, call on 5 new students to stand together in a second group.

TEACHER SAY: How many are in the first group?

STUDENTS DO: Respond together: 2.

TEACHER SAY: How many are in the second group?

STUDENTS DO: Respond together: 5.

TEACHER SAY: What is the difference between the number of students in the first group and the number of students in the second group? Turn to your Shoulder Partner and talk about your ideas. Remember that there is more than one way to solve the problem!

STUDENTS DO: Turn and talk to Shoulder Partners about their ideas for how to find the difference.

TEACHER SAY: Raise your hands if you think you know how to find the difference between the two groups.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with hands raised and allow them to share their ideas. Engage them in a conversation about the mathematics. Students may share the answer, but should explain how they got the answer. Some students may just "see" that there are 3 more students in the second group. Some may subtract 5-2. Others may use the number line on the board or in their heads. Possible misconceptions: 2 + 5; 2 – 5.

STUDENTS DO: Share their ideas. Show and explain their thinking. Ask questions. Change their minds. Help each other.

TEACHER DO: If some students understand how to solve the problem, make sure they explain it in their own words to their classmates. If students are unable to answer or explain, use a number line again to show them one way to think about the problem.

TEACHER SAY: **You were such great thinkers today! You were very brave in sharing your thinking and your ideas. We'll talk more about subtraction tomorrow. Does anyone have any questions?**

STUDENTS DO: Raise hands to ask questions, if they have any.

Share (5-10 mins)

Directions

1. **TEACHER SAY:** **We have used a lot of different strategies for solving math problems. We've used ten frames, number lines, counting objects, drawings, patterns, comparing, and talking with our Shoulder Partners. What strategies have worked best for you? Why? There are no right answers! You're just talking about what works for you.**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students to share their thinking. Consider calling on students who do not raise their hands often (or at all). Take note of students' thinking and consider ways you can incorporate new and existing strategies in future instruction to support student learning.

TEACHER SAY: **What wonderful mathematical thinking you've shared today! You really helped each other think about what math strategies work for you and why.**

Lesson 45 Overview

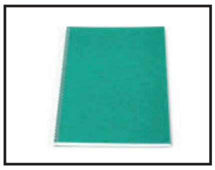
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens up to 39 • Read and write numerals up to 39 • Demonstrate understanding of the relationship between numbers and quantities up to 39 • Apply the ten-frame structure as a way to represent quantities • Apply strategies to find the difference between two numbers	• Addition (Add) • Counting on • Difference • Number line • Strategy • Subtraction (Subtract)	• Create or print out 4 ten frames for Learn segment.

MATERIALS

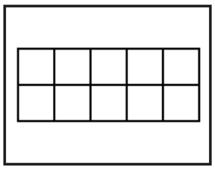
Calendar Math Area



Math Journal



Four Ten Frames



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: Let's find out how many days we have been in school. Yesterday, there were 40 straws in the Tens pocket and 4 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 5. I'm going to count them. (Count the straws.) Now we have 45 straws. What does that tell us?

TEACHER DO: Using **Calling Sticks**, select a student to answer.

STUDENTS DO: When called on by teacher, students answer: We have been in school 45 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 45 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 45 on the number chart.

TEACHER SAY: ______ drew a circle around the number 45 on the number chart. Let's count the numbers we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 45, saying the numbers they know and listening to the teacher say the numbers they don't know.

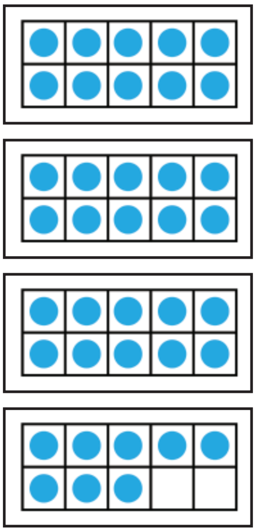
Learn (25-30 mins)

Directions

1. TEACHER SAY: Today we have two new numbers to learn! These two numbers come after 37. Does anyone know what they are? How do you know?

STUDENTS DO: Raise hands to respond. Selected students answer the question and explain their thinking.

TEACHER SAY: Let's show the first new number, 38, using our ten frames. Watch me draw the dots and count aloud as I draw.



TEACHER DO: Draw 38 dots in the ten frames as you count aloud.

STUDENTS DO: Count aloud as the teacher draws 38 dots on the ten frames.

TEACHER SAY: We have 38 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: How many extra ones do we have?

STUDENTS DO: Respond together: 8.

TEACHER SAY: Right! So the number 38 has 3 sets of ten and 8 extra ones.

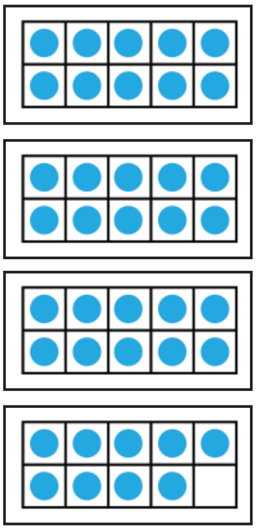
2. TEACHER DO: Write 38 on the board. Hand out math journals and ask students to open them to the next blank page.

TEACHER SAY: The number 38 has two digits, or numbers. When we write it, we start with a 3 (for our sets of tens) and an 8 (for our extra ones). Let's Skywrite the number 38 three times.

STUDENTS DO: Stand and **Skywrite** the number 38 three times.

TEACHER SAY: Write the number 38 three times in your math journal. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 38 in their journals and check their partner's work.



3. TEACHER SAY: Great job! 39 is our second new number today. 39 is also a two-digit number. Let's show how much 39 is using our ten frames. Count with me as I draw the dots.

TEACHER DO: Draw 39 dots in the ten frames, counting aloud as you draw.

STUDENTS DO: Count aloud as the teacher draws 39 dots on the ten frames.

TEACHER SAY: Now, we have 39 dots on our ten frames. How many of our ten frames are full?

STUDENTS DO: Respond together: 3.

TEACHER SAY: How many extra ones do we have?

STUDENTS DO: Respond together: 9.

TEACHER SAY: Right! So the number 39 is 3 sets of ten and 9 extra ones. What do you notice about our last ten frame?

STUDENTS DO: Raise hands to answer the question. Selected student responds: It is almost full.

TEACHER DO: Write the number 39 on the board.

TEACHER SAY: We write the number 39 with a 3 and a 9 right beside it. Now, let's practice Skywriting the number 39 three times!

STUDENTS DO: Stand and **Skywrite** the number 39 three times.

TEACHER SAY: Write the number 39 three times in your math journal. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 39 in their journals and check their partner's work. Keep math journals out.

4. TEACHER SAY: Great job! In math class, we've been learning to count higher and higher. But, we've also been learning about subtraction. We have talked about subtraction meaning "taking away." But, we talked about subtraction a little differently yesterday. Who remembers what we did?

STUDENTS DO: Raise hands to answer the question. Students may note that they talked about finding the difference, using number lines to count up, or figuring out the difference between two groups of students. Some students may have difficulty remembering.

TEACHER SAY: (If necessary) We talked about subtraction as "finding the difference." We looked at two groups of students and found the difference between them. Some of us counted up, some of us subtracted, and we all looked at the number line to count how many jumps we made to get from one number to another. Let's practice again.

TEACHER DO: Call 3 students up to form a group. Call 7 students up to form a second group.

TEACHER SAY: How many are in the first group?

STUDENTS DO: Respond together: 3.

TEACHER SAY: How many are in the second group?

STUDENTS DO: Respond together: 7.

TEACHER SAY: What is the difference between the number of students in the first group and the number of students in the second group? How can we find the answer to that question? Remember, there is more than one way to solve the problem. Turn to your Shoulder Partner and talk about your ideas.

STUDENTS DO: Turn and talk to Shoulder Partners about their ideas for how to find the difference.

TEACHER SAY: Raise your hands if you think you know how to find the difference between the two groups.

STUDENTS DO: Raise hands to volunteer.

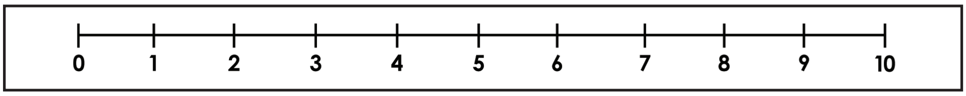
TEACHER DO: Call on students with hands raised and allow them to share their ideas. Engage them in a conversation about the mathematics. Students may share the answer, but should explain how they got the answer. Some students may just "know," but have to tell how they know. Other students may count up from 3 to 7. Others may subtract 7-3. Possible misconceptions: 3 + 7; 3 – 7.

STUDENTS DO: Share their ideas. Show and explain their thinking. Ask questions. Change their minds. Help each other.

TEACHER DO: If some students understand how to solve the problem, make sure they explain it in their own words to their classmates. If students are unable to answer or explain, use a number line to show them one way to think about the problem:

TEACHER SAY: Yesterday, we found the difference by counting up on a number line. Let's start by thinking about this problem the same way.

TEACHER DO: Draw or display a number line from 0-10 on the board (or somewhere all students can see).



TEACHER SAY: How many students are in the first group?

STUDENTS DO: Respond together: 3.

TEACHER SAY: I'm going to draw a circle at 3 on the number line for the first group. How many students are in the second group?

STUDENTS DO: Respond together: 7.

TEACHER SAY: I'm going to draw a square at 7 on the number line for the second group. Help me count up from 3 to 7. How many jumps do I have to make on the number line to get from 3 to 7?

STUDENTS DO: Raise hands to respond. Selected student answers the question: 4.

TEACHER SAY: Right, we have to make 4 jumps to get from 3 to 7.

TEACHER DO: Model how to make the jumps on the number line.

TEACHER SAY: The difference between 3 and 7 is 4. The difference between the number of students in the first group and the number of students in the second group is 4. Let's try another one.

TEACHER DO: Call two different groups of students to the front of the room and ask students to find the difference between the two groups. Challenge students to work with their Shoulder Partners to find the answer. As students work, walk around to monitor their conversations. Take note of different strategies students are using. Have each pair share their strategies to show students there is more than one way to solve the problems.

STUDENTS DO: Work with partners. Try different strategies. Share their answers, show their work, and explain their thinking. Ask questions.

TEACHER SAY: It's very exciting to see how much you are learning from me and from each other! We will continue to work on subtraction and addition together. Great work!

Share (5-10 mins)

Directions

1. TEACHER SAY: Did anyone try a new strategy today? Raise your hand to tell us about it. Did it work for you?

STUDENTS DO: Raise hands to volunteer. Selected students discuss the new strategy they tried and whether or not it worked.

2. TEACHER SAY: What strategy would you like to try tomorrow?

STUDENTS DO: Raise hands to volunteer. Selected students discuss what strategies they'd like to try tomorrow.

3. TEACHER SAY: Does anyone have any questions they'd like to ask about subtraction or addition?

STUDENTS DO: Raise hands to ask questions about subtraction or addition.

TEACHER DO: Take note of students who would like to try new strategies and questions they have about subtraction or addition.

Lesson 46 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count by ones and tens up to 40
- Read and write numerals up to 40
- Apply the ten-frame structure as a way to represent quantities
- Apply understanding of counting and quantity to play math games and activities

LESSON PREPARATION FOR THE TEACHER

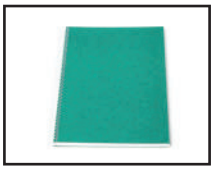
- Create or print out 4 ten frames for Learn segment.
- As noted in Term and Theme Preparation for the Teacher, in this lesson, students will celebrate counting to 40 by playing games and doing activities in which they practice counting by1s and 10s to 40. Familiarize yourself with the games and activities to decide which ones you would like to do and gather the materials you will need for each. The materials you need are included in the game descriptions.

MATERIALS

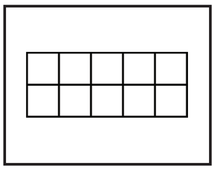
Calendar Math Area



Math Journal



Four Ten Frames



Calendar (15 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, ______ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: Let's find out how many straws are in the Ones pocket now, and how many days we have been in school. Yesterday, there were 40 straws in the Tens pocket and 5 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 6. I'm going to count them. (Count the straws.) Now we have 46 straws. We have been in school 46 days! Now, my Calendar Helper will draw a circle around the number 46 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 46 on the number chart.

TEACHER SAY: ______ drew a circle around the number 46 on the number chart. Let's count the days we have circled so far on our number chart. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 46, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (40 mins)

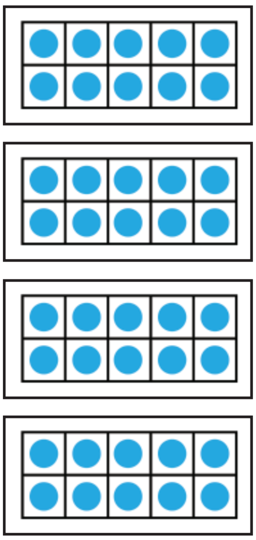
Directions

1. **TEACHER SAY: We have learned all of the numbers up to 39. Today, we have one special new number to learn! Does anyone want to guess what number that is? How do you know?**

STUDENTS DO: Raise hands to respond. Selected students answer the questions.

TEACHER SAY: Our special number is 40! First, we're going to see how much 40 is and then we're going to do some counting games and activities to celebrate getting to 40!

2. **TEACHER SAY: Let's show what 40 looks like on our ten frames. Watch me draw the dots and count aloud as I draw. Let's see how many ten frames we will need!**



TEACHER DO: Draw 40 dots in the ten frames.

STUDENTS DO: Count aloud as the teacher draws 40 dots on the ten frames.

TEACHER SAY: We have 40 dots on our ten frames. How many of our ten frames did we need to show 40? Can you show me on your fingers?

STUDENTS DO: Raise hands showing four fingers to respond: 4

TEACHER SAY: What will we have to do when we learn the next number?

STUDENTS DO: Respond together: Add a ten frame.

TEACHER DO: Write 1 above the first ten frame, 2 above the second ten frame, 3 above the third ten frame, and 4 above the fourth ten frame.

TEACHER SAY: If we count the first ten frame, how many dots is that?

STUDENTS DO: Respond together: 10.

TEACHER DO: Write 10 under the first ten frame.

TEACHER SAY: If we count the first two ten frames, how many dots is that?

STUDENTS DO: Raise hands to respond. Selected student answers.

TEACHER SAY: Let's count to make sure. You count them aloud while I point.

STUDENTS DO: Count aloud the first two ten frames.

TEACHER DO: Write 20 under the second ten frame.

TEACHER SAY: If we count the first three ten frames, how many dots is that?

STUDENTS DO: Raise hands to respond. Selected student answers.

TEACHER SAY: Let's count to make sure. You count them aloud while I point.

STUDENTS DO: Count aloud the first three ten frames.

TEACHER DO: Write 30 under the third ten frame.

TEACHER SAY: If we count all four of the ten frames, how many dots is that?

STUDENTS DO: Raise hands to respond. Selected student answers.

TEACHER SAY: Let's count to make sure. You count them aloud while I point.

STUDENTS DO: Count aloud all of the ten frames.

TEACHER DO: Write 40 under the fourth ten frame.

TEACHER SAY: What do you notice about the four numbers I have written under the ten frames? Turn and talk to your Shoulder Partner and share your thinking.

STUDENTS DO: Turn and talk to shoulder partners.

TEACHER DO: Use **Calling Sticks** to select students to share their thinking. If needed, ask questions to help students think about what is the same about the numbers, what is different, and how the numbers relate to the ten frames.

STUDENTS DO: Share thinking about the ten frames. Possible responses include: They all end in zero, the first number is different for each number, the first number matches the order of the ten frames above, you can skip count by 10's to get from 10 to 40.

TEACHER DO: If necessary, point out that all of the numbers end in zero, meaning there are no extra ones, only tens. We can count them by skip counting.

TEACHER SAY: The number 40 has 4 sets of ten and 0 extra Ones. We can count by 10's to count to 40. Watch as I point to each ten frame and count by 10's: 10, 20, 30, 40.

3. TEACHER DO: Write the number 40 on the board and hand out math journals. Ask students to open their journals to the first blank page.

STUDENTS DO: Open math journals to the first blank page.

TEACHER SAY: The number 40 has two digits or numbers. When we write it, we start with a 4 and then a 0. Let's Skywrite the number 40 three times.

STUDENTS DO: Stand and **Skywrite** the number 40 three times.

TEACHER SAY: Let's practice writing 40 in our journals now. Write the number 40 three times. Then, check your Shoulder Partner's work.

STUDENTS DO: Write 40 in their journals and check their partner's work.

Note for the Teacher: Read the counting games and activities below and decide which ones you would like your students to do today. It is not necessary to complete all games and activities. However, once students have learned a game or activity, you can include it in future lessons or counting practice. All of these activities and games can be played again when students reach 50, 60, 70, 80, 90, and 100.

Bingo

Create or print out **number charts** from 1-40 as shown below. You will need one chart for each

student. Gather enough **counting objects** for each student to have 40.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

Call out random numbers from the number chart. Students will find the number and place a counter on it. Repeat until the class has covered a row or column of numbers. Play a few times together.

Catch and Count
This game is played the same as **Counting Classmates**, but instead of pointing, the students gently toss a **ball** to their classmates. The colleague who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Counting Classmates
The teacher will point to self and say, "One." The teacher will then point to a student. That student must stand and say, "Two." That student points at a colleague. That student stands and says, "Three." The game continues until the class reaches 40. Once all students are standing, students will sit and count when their colleague points to them. Option: Count by 10's to 40 until all students are standing.

Counting Cups
In Counting Cups, students play in small groups. Prepare for the activity by gathering **4 paper or Styrofoam cups** for each small group. Write 10 on each cup. Gather **counting objects** so each group has 40. Place them in **bags or cups** to make it easy to hand them out. Prepare the **recording sheets** (or have students create them) shown below.

Cups	Counters
1	
2	
3	
4	

Each student needs a recording sheet. To play, students will dump out 1, 2, 3, or 4 cups of counters, count the objects, and record the total on the recording sheet across from the number of cups they dumped out. Students will continue to dump out cups and record the totals until the recording sheet is filled. Each time they finish dumping out counters and counting, they should return 10 counters to each cup.

Jump Up Game
Students squat down and clap from 1 to 40. Each time they get to a ten (10, 20, 30, 40), they jump and shout that number.

Missing Number Detectives
Create several **activity sheets** that show numbers in a sequence with some of the numbers missing (examples shown below). Students work independently or in pairs to fill in the missing numbers.

1	2		4	
6			9	10

23	24	25		
28		30		32

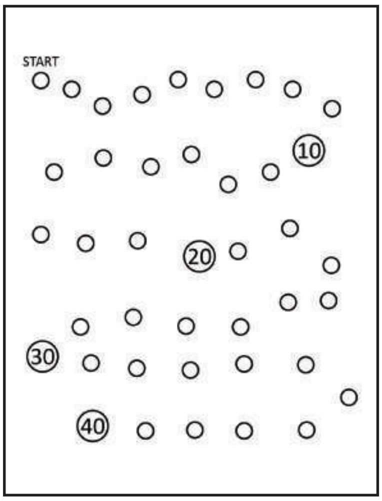
	13	14		16
		19		21

31		33		35
	37		39	

Alternatively, this activity can be completed on one recording sheet showing 1-40 (example shown below).

1	2			5	6		8		10
	12	13		15			18	19	
21			24		26	27		29	30
		33	34			37			

Race to 40
This game can be played by 2-4 players. To prepare, create or print out **game boards** as shown below. Write numbers 1-40 in circles on the game board. Write tens numbers in larger circles. Create **5 tortoise and 5 hare cards** for each group (examples shown below). Each group will need **4 different counters**.







Tortoise and hare cards are shuffled and placed face down. All students start at 1 and take turns turning over a card. If a tortoise card is turned over, the student moves 1 space. If a hare card is turned over, the student moves 10 spaces. When all cards are used, a student should shuffle them and turn them face down again. The first player to reach 40 wins!

Tower of Tens

In this activity, students create a tower of cups to help them count from 0-40. Each student need **5 Styrofoam cups** and **pens or markers** (different colors, if possible). Guide students through the activity: Students should take one cup, turn it upside down, and write 0 on the lip. Turn the second cup upside down and write 10 on the lip. Third cup: 20. Fourth cup: 30. Last cup: 40. On each cup, students should write the numbers 1-9 from the lip of the cup to the bottom of the cup. When finished, students can use their cups to practice counting from 0 to 40.

4. TEACHER SAY: That was fun celebrating getting to 40! We'll do this again when we get to 50.

Share (5 mins)

Directions

1. TEACHER SAY: What was your favorite game or activity today? Why is it your favorite? Are there any other counting games or activities you would like to do?

STUDENTS DO: Raise hands to respond.

TEACHER DO: Call on students with raised hands to talk about their favorite games and activities and their ideas for games/activities for the future.

Lesson 47 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Compare numbers 0-20, using symbols >, =, and <
- Count by ones and tens to 40
- Read and write numerals from 0-40
- Apply strategies to solve subtraction problems

KEY VOCABULARY

- Strategy
- Subtraction (Subtract)

LESSON PREPARATION FOR THE TEACHER

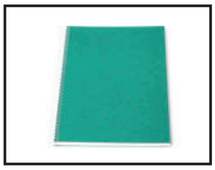
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes.

MATERIALS

Calendar Math Area



Math Journal



Sets of 10 counters (one set per pair of students)



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **Let's find out how many straws are in the Ones pocket now, and count how many days we have been in school. Yesterday, there were 40 straws in the Tens pocket and 6 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 7. I'm**

going to count them. (Count the straws.) Now we have 47 straws. We have been in school 47 days!

Now, _______ will draw a circle around the number 47 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 47 on the number chart.

TEACHER SAY: _______ drew a circle around the number 47 on the number chart. Let's count the numbers we have circled on our number chart so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 47, saying the numbers they know and listening to the teacher say the numbers they don't know.

TEACHER DO: Hand out math journals and ask students to open to the first blank page.

STUDENTS DO: Open math journals to the first blank page.

TEACHER SAY: I'm going to write four practice problems on the board (or overhead projector). Copy the problems into your math journal. In the square, write the symbol that makes the math sentence correct: greater than >, less than <, or equal to.

TEACHER DO: Write practice problems on the board, such as the following:

4 ___ 9	12 ___ 12	20 ___ 19	6 ___ 16

STUDENTS DO: Copy the problems into their journals and add the symbols to show greater than, less than, or equal to.

TEACHER DO: Tell students the correct answers to the problems. Have them correct their work in their journals, as needed.

STUDENTS DO: Correct errors, if any. Keep journals.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: We don't have a new number to learn today. Instead, we are going to practice all of the numbers we have learned so far. Who can tell me the largest or biggest number we have learned? Whisper it into your hands first, then I will call on someone to answer.**

STUDENTS DO: Whisper into their hands: 40.

TEACHER DO: Using **Calling Sticks**, select a student to answer.

TEACHER SAY: That's right! Let's play a counting game and count up to 40! We are going to play Hops! Do you remember how to play? We will hop up and down on one leg while we count to 40. Let's play two times. 40 is a big number – see if you can hop that many times in a row!

STUDENTS DO: Hop up and down on one foot while counting to the number 40. Play the game two times and then sit down.

2. **TEACHER SAY: Let's see how well we know all of our new numbers from the past few days. Open your math journals to the next blank page.**

STUDENTS DO: Open math journal to the next blank page.

TEACHER SAY: I am going to call out a number and I want you to write it down in your journal. Are you ready? The first number I want you to write is the number 33.

STUDENTS DO: Write the number 33 in math journals.

TEACHER SAY: Turn to your Shoulder Partners and check each other's work.

STUDENTS DO: Turn to shoulder partners to check each other's work.

TEACHER DO: Throughout this activity, walk around the room and help students as needed. Take note of students who may need additional instruction. Choose a student who you have seen write the number correctly to write it on the board.

TEACHER DO: Choose a student who you have seen write the number correctly to write it on the board.

TEACHER SAY: I would like for _____ to write the number 33 on the board. Check your work!

STUDENTS DO: Selected student writes 33 on the board. Seated students check their work and correct it as needed.

TEACHER DO: Repeat this process for several numbers from 0-40. Continue for about 10 minutes.

3. TEACHER SAY: Good work! We will practice the rest of the numbers tomorrow. Now, we are going to practice subtraction. You will work with your Shoulder Part-ner. You can use counting objects or draw in your journals.

I will give you a subtraction problem to solve. Some of the problems will ask you to take away. Others will ask you to find the difference. They are all subtraction problems. Do you have any questions?

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Hand out counting objects. Give students the subtraction problems one at a time (examples shown below). For each problem, do the following:

- Allow students time to figure out the answer.
- Permit students to draw and use number lines, counters, drawings, or fingers.
- Walk around and observe students' work and conversations.
- Take note of students who correctly solve the problem.
- Note the different strategies students use.
- Note students who may need additional instruction.
- Ask volunteers to come to the board and show their classmates how they solved the problem. If students do not solve the problem correctly on the board, ask their classmates to provide help.

Problem Examples:

- 9 – 3 = ______
- Find the difference between 2 and 6.
- Yasmin has 8 balloons. Mido has 5 balloons. How many more balloons does Yasmin have than Mido?
- Ahmed had 4 pies. He gave 2 pies to Amany. How many pies does Ahmed have left?
- 10 – 5 =
- Find the difference between 4 and 9.

TEACHER SAY: Great work today! In our next lesson, we will take a look at addition and sub-traction together.

Share (5-10 mins)

Directions

1. **TEACHER SAY: For sharing time today, I would like for you and your Shoulder Partner to discuss what you know about subtraction. What does it mean to subtract? What math symbols do you use? How do you find the answer?**

STUDENTS DO: Discuss what they know about subtraction with their partners.

TEACHER DO: Walk around the room and listen to the students talk to their partners. Give students 3 minutes to share. Then, using **Calling Sticks**, select 3 groups to share with the class.

STUDENTS DO: Share their thinking with their classmates.

Lesson 48 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count by ones and tens to 40
- Read and write numerals from 0-40
- Represent quantities with a number up to 40
- Apply strategies to solve addition and subtraction problems

KEY VOCABULARY

- Addition (Add)
- Equal Sign (=)
- Opposite
- Strategy
- Subtraction (Subtract)

LESSON PREPARATION FOR THE TEACHER

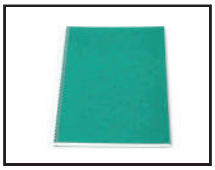
- Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area



Math Journal



Sets of 10 counters (one set per pair of students



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: Let's count how many days we have been in school. Remember from yesterday, there were 40 straws in the Tens pocket and 7 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 8. I'm going to count them. (Count the straws.) Now

we have 48 straws. What does that tell us?

STUDENTS DO: Respond together: We have been in school 48 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 48 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 48 on the number chart.

TEACHER SAY: **______ drew a circle around the number 48 on the number chart. Let's count the number we have circled on our number chart so far. Say the numbers you know and listen to me say the numbers you don't know.**

STUDENTS DO: Count along with the teacher to 48, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **We have been learning our numbers all the way up to 40! Let's play Jump Up counting to 40, but this time we'll jump up and shout every time we get to a 10. Who can tell me what numbers we will shout out?**

STUDENTS DO: Raise hands to volunteer. Selected students answer the question to identify 10, 20, 30, and 40. Play the game 1-2 times.

2. TEACHER DO: Hand out math journals and ask students to open them to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: **Yesterday, we practiced writing numbers in our journals. Let's practice a few more. Just like yesterday, I am going to call out a number and I want you to write it down in your journal. The first number I want you to write is the number 36.**

STUDENTS DO: Write the number 36 in math journals.

TEACHER DO: Walk around the room and help students as needed. Take note of students who may need additional instruction. Choose a student who you have seen write the number correctly to write it on the board.

TEACHER SAY: **I would like for _____ to go write the number 36 on the board. Check your answer!**

STUDENTS DO: Selected student writes 36 on the board. Seated students check their work and correct it as needed.

TEACHER DO: Repeat this process for several numbers from 0-40. Continue for about 10 minutes.

3. TEACHER SAY: **Great work! We know how to write all of our numbers from 1-40. Today, we're going to look at addition and subtraction together. You will work with your Shoulder Partner. You will need your math journal and counting objects.**

TEACHER DO: Hand out counting objects to partners.

TEACHER SAY: **Use your counting objects, draw pictures, or draw a number line to find an answer to this problem: 5 + 5 = ______.**

STUDENTS DO: Work with their partners to solve the problem.

TEACHER DO: Call on partners to share their answers and, if possible, model their solutions.

TEACHER SAY: Let's write the addition sentence in our journals: 5 + 5 = 10.

STUDENTS DO: Write 5 + 5 = 10 in their math journals.

TEACHER SAY: Great! Let's do the next problem. Work with your partner to find the answer: 10 – 5 = ______.

STUDENTS DO: Work with their partners to solve the problem.

TEACHER DO: Call on partners to share their answers and, if possible, model their solutions.

TEACHER SAY: Let's write the subtraction sentence in our journals, right under the last problem we wrote: 10 – 5 = 5.

STUDENTS DO: Write 10 – 5 = 5 in their math journals.

TEACHER DO: Repeat the process with the following problems (as many pairs as possible in the time allowed):
6 + 2 = ______
8 – 6 = ______
4 + 1 = ______
5 – 4 = ______

STUDENTS DO: Solve the problems with their partners using objects or drawings. Record the addition and subtraction sentences in their journals. Some may notice that there is a relationship between the addition and subtraction problems they are solving.

TEACHER SAY: Do you notice anything about the math problems you have been writing? Do you notice any patterns? Similarities? Talk to your Shoulder Partner about it.

STUDENTS DO: Talk to their partners about the problems. Possible ideas include: They use the same numbers, they are opposites, we can use the addition problems to find the answers to the subtraction problems (or vice versa).

TEACHER SAY: Addition and subtraction are opposites. In addition, we put together. In subtraction, we take apart. But they are related. We can use what we know about addition to solve subtraction problems. And we can use what we know about subtraction to solve addition problems. We'll talk about this more tomorrow. Great work today!

TEACHER DO: Collect journals and counting objects.

Share (5-10 mins)

Directions

1. **TEACHER SAY: I'm going to write two problems on the board. Look at both problems and see if you can use the first problem to solve the second one – no counters or drawings.**

TEACHER DO: Write the following problems on the board:
2 + 5 = 7
7 – 2 = ______

STUDENTS DO: Look at the problems and try to use the first problem to solve the second one without counting objects (or fingers) or drawing pictures.

TEACHER DO: Give students 1-2 minutes to think about the problem.

TEACHER SAY: Raise your hands if you think you know the answer. Tell us how you solved it.

STUDENTS DO: Raise hands to volunteer. Share their solutions and explain how they used the first problem to solve the second problem.

Lesson 49 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Represent quantities with a number up to 40 • Solve addition problems to create fact families • Identify patterns in fact families	• Addition (Add) • Equals • Fact Family • Pattern • Strategy • Subtraction (Subtract)	• Create or print a worksheet of addition facts families (example shown below). Alternatively, students can copy the problems into their math journals. They will not work on all of the problems in one day, so they can copy each set as they go. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

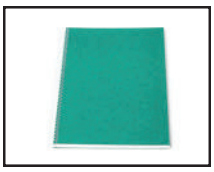
1 Family	2 Family	3 Family	4 Family	5 Family
1 + 0 = ______	2 + 0 = ______	3 + 0 = ______	4 + 0 = ______	5 + 0 = ______
1 + 1 = ______	2 + 1 = ______	3 + 1 = ______	4 + 1 = ______	5 + 1 = ______
1 + 2 = ______	2 + 2 = ______	3 + 2 = ______	4 + 2 = ______	5 + 2 = ______
1 + 3 = ______	2 + 3 = ______	3 + 3 = ______	4 + 3 = ______	5 + 3 = ______
1 + 4 = ______	2 + 4 = ______	3 + 4 = ______	4 + 4 = ______	5 + 4 = ______
1 + 5 = ______	2 + 5 = ______	3 + 5 = ______	4 + 5 = ______	5 + 5 = ______
1 + 6 = ______	2 + 6 = ______	3 + 6 = ______	4 + 6 = ______	5 + 6 = ______
1 + 7 = ______	2 + 7 = ______	3 + 7 = ______	4 + 7 = ______	5 + 7 = ______
1 + 8 = ______	2 + 8 = ______	3 + 8 = ______	4 + 8 = ______	5 + 8 = ______
1 + 9 = ______	2 + 9 = ______	3 + 9 = ______	4 + 9 = ______	5 + 9 = ______
1 + 10 = _____	2 + 10 = _____	3 + 10 = _____	4 + 10 = _____	5 + 10 = _____
6 Family	7 Family	8 Family	9 Family	10 Family
6 + 0 = ______	7 + 0 = ______	8 + 0 = ______	9 + 0 = ______	10 + 0 = ______
6 + 1 = ______	7 + 1 = ______	8 + 1 = ______	9 + 1 = ______	10 + 1 = ______
6 + 2 = ______	7 + 2 = ______	8 + 2 = ______	9 + 2 = ______	10 + 2 = ______
6 + 3 = ______	7 + 3 = ______	8 + 3 = ______	9 + 3 = ______	10 + 3 = ______
6 + 4 = ______	7 + 4 = ______	8 + 4 = ______	9 + 4 = ______	10 + 4 = ______
6 + 5 = ______	7 + 5 = ______	8 + 5 = ______	9 + 5 = ______	10 + 5 = ______
6 + 6 = ______	7 + 6 = ______	8 + 6 = ______	9 + 6 = ______	10 + 6 = ______
6 + 7 = ______	7 + 7 = ______	8 + 7 = ______	9 + 7 = ______	10 + 7 = ______
6 + 8 = ______	7 + 8 = ______	8 + 8 = ______	9 + 8 = ______	10 + 8 = ______
6 + 9 = ______	7 + 9 = ______	8 + 9 = ______	9 + 9 = ______	10 + 9 = ______
6 + 10 = _____	7 + 10 = _____	8 + 10 = _____	9 + 10 = _____	10 + 10 = _____

MATERIALS

Calendar Math Area



Math Journal



Sets of 10 counters (one set per pair of students)



Addition Fact Family worksheets (See Lesson Preparation for the Teacher for instructions.)

Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many days have we been in school now? Let's count our Ones and Tens pockets! Yesterday, there were 40 straws in the Tens pocket and 8 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 9. I'm going to count them. (Count the straws.) Now we have 49 straws. What does that tell us?

STUDENTS DO: Respond together: We have been in school 49 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 49 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 49 on the number chart.

TEACHER DO: ______ drew a circle around the number 49 on the number chart. Let's count the numbers we have circled on our number chart so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 49, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions

1. TEACHER SAY: We are still working on becoming masters of the numbers 1-40. Let's play a different counting game to count up to 40! This game is called Stand Up/Sit Down! Do you remember it? We are going to count to 40. Each time we say a number we will stand or sit down. We are sitting down now, so when we say 1 we will stand up. When we say 2 we will sit down, and so on.

STUDENTS DO: Play Stand Up/Sit Down and count to the number 40. At the end of the game, all students sit down.

TEACHER SAY: Let's play again. This time, let's count by 10's to 40. We're sitting down now, so when we say 10 we will stand up.

STUDENTS DO: Play Stand Up/Sit Down and count to the number 40 two times. At the end of the game, all students sit down.

TEACHER SAY: Wow, that second game was fast! Why was it so fast?

STUDENTS DO: Raise hands to respond. Selected students should note that it was faster because they counted by 10's instead of 1's.

TEACHER SAY: We've been talking about addition and subtraction a lot lately. Today we're going to look at some addition facts. They're called facts because the answers never change. If we memorize them (or remember them), we don't have to solve them every time we see them. We just know the answers!

TEACHER DO: Hand out addition fact family worksheets (or math journals, and ask students to open them to the next blank page). Hand out counting objects to each student. If students are copying the problems, display the 1 Family problems on the board (or overhead projector). For students who need additional support, consider having them work with a partner or gather a small group to work with you while the remaining students work independently.

STUDENTS DO: Solve the problems to complete the 1 Family.

TEACHER DO: Go over the answers with students to make sure they have the correct addition facts recorded. If time allows, do the next fact family. Students will continue to work on the fact family worksheet each day until it is complete, so be sure students write their names on their sheets. Collect and save them for the next lesson.

Share (5-10 mins)

Directions

1. TEACHER SAY: For sharing time today, I would like for you and your Shoulder Partner to talk about the addition facts you worked on today. What did you notice about the answers as you solved the problems. Did you see any patterns? You have about 1 minute to talk to your partner.

STUDENTS DO: Talk to their shoulder partners about things they noticed about the problems and answers they worked on today. After about 1 minute, raise hands to share thinking.

TEACHER DO: Select students with raised hands to share their thinking with their classmates.

TEACHER SAY: We will continue to work on our fact families until we finish the whole page. As you work, continue to look for patterns. See if the patterns you saw today continue.

Lesson 50 Overview

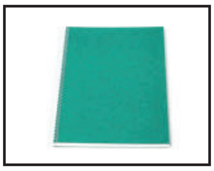
OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens to 40 • Read and write numerals from 0-40 • Solve addition problems to create fact families • Identify patterns in fact families	• Addition (Add) • Equals • Fact Family • Pattern • Strategy • Subtraction (Subtract)	• Have available the fact family worksheets students started in the previous lesson. • Gather sets of 10 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes

MATERIALS

Calendar Math Area



Math Journal



Sets of 10 counters (one set per pair of students)



Addition Fact Family worksheets (See Lesson Preparation for the Teacher for instructions.)

Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: Yesterday, there were 40 straws in the Tens pocket and 9 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 10. I'm going to count them. (Count the straws.)

Oh look! We have a set of 10 in our Ones pocket! Who remembers what we do when we have 10 Ones? Whisper the answer into your hand.

STUDENTS DO: Whisper answer into hands.

TEACHER DO: Use Calling Sticks to select a student to share their answer.

STUDENT DO: Selected student answers: We bundle them together and move them to the Tens pocket.

TEACHER SAY: **Yes! We bundle them together and move them to our Tens pocket. Now we have 50 straws. 49 and 1 more is 50. How many days have we been in school?**

STUDENTS DO: Respond together: 50.

TEACHER SAY: **Now, my Calendar Helper will draw a circle around the number 50 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 50 on the number chart.

TEACHER DO: ______ drew a circle around the number 50 on the number chart. Let's count the numbers we have circled on our number chart so far. Say the numbers you know and listen to me say the numbers you don't know.

STUDENTS DO: Count along with the teacher to 50, saying the numbers they know and listening to the teacher say the numbers they don't know.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Yesterday we started working on our addition fact families. We're going to continue to work on our addition fact families today.**

TEACHER DO: Hand out addition fact family worksheets students started in the previous lesson (or hand out math journals and ask students to find the page they were working on yesterday). Hand out counting objects.

If students are working in their journals, continue to display fact family sets where all students can see. Otherwise, students can continue to work on their worksheets.

If needed, pair students to work together and/or call a small group of students to work with you while other students work independently.

As students are working, review the directions for the game Counting Classmates (or Catch and Count), if needed.

STUDENTS DO: Continue working on their addition fact family sheets for about 20 minutes.

TEACHER DO: Collect worksheets (or math journals) and counting objects. If students are finished, have them tape or glue their fact family worksheets into their math journals. If students are not finished, continue to have them work on them over the next few days until they are complete (even if it is not noted in this Teacher Guide).

TEACHER SAY: **Let's finish by playing a quick game of Counting Classmates (or Catch and Count). We will count by 1's to 40.**

STUDENTS DO: Stand and play the counting game with the teacher and classmates.

Share (5-10 mins)

Directions

1. TEACHER DO: Ask students questions to help them think about mathematical processes, patterns, and facts.

TEACHER SAY: **Did you notice any new patterns on your addition fact family sheets today? What else did you notice? How do you think we could use these sheets to help us with addition problems? How could we use them to help us with subtraction problems?**

STUDENTS DO: Share their thinking with their classmates. Ask questions. Consider the relationship between addition and subtraction. Consider ways to use the fact family sheets to help them solve math problems.

PRIMARY 1

Mathematics

Chapter 7

Lessons 51 -60

Overview

Lessons 51-60

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from classmates' perspectives.	5-10 minutes

Learning Indicators

Throughout days 51-60, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count by ones and tens to 100
- Read and write numerals from 0 to 100
- Understand the relationship between numbers and quantities up to 100
- Write numbers and represent quantities with a number to 100
- Apply the Ten-Frame structure as another way to represent quantities in familiar grouping

OPERATIONS AND ALGEBRAIC THINKING:

- Classify objects by their attributes (color, size, and shape)
- Add and subtract within 20 using strategies such as: Counting on
- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false
- Relate counting to addition and subtraction
- Fluently add and subtract within 10
- Use addition and subtraction within 20 to solve word problems with unknowns in all positions

MEASUREMENT AND DATA:

- Tell and write time in hours using analog and digital clocks
- Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

CH 7 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
51	**Students will:** • Participate in Calendar Math activities • Compare objects in a set to identify one that does not belong • Analyze number patterns in the hundreds chart • Count by ones to 100
52	**Students will:** • Participate in Calendar Math activities • Count by ones to 100 • Compare objects in a set to identify one that does not belong • Apply strategies to add and subtract within 10 • Tell time to the hour on an analog clock
53	**Students will:** • Participate in Calendar Math activities • Count by ones to 100 • Apply strategies to add and subtract within 10 • Read and write time to the hour on an analog clock • Collect data to create a picture graph
54	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 40-49 • Read and write time to the hour on analog and digital clocks • Answer questions about data in a picture graph
55	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 50-59 • Read and write time to the hour on analog and digital clocks • Apply the ten-frame structure as a way to represent quantities • Solve subtraction problems to create fact families • Answer questions about data in a bar graph
56	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 60-69 • Apply the ten-frame structure as a way to represent quantities • Solve subtraction problems to create fact families • Read and write time to the hour on analog and digital clocks

LESSON	INSTRUCTIONAL FOCUS
57	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 70-79 • Solve addition problems within 20 • Describe strategies for solving challenging addition problems
58	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 80-89 • Solve subtraction problems within 20 • Describe strategies for solving challenging subtraction problems • Apply understanding of time to create a schedule
59	**Students will:** • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 90-99 • Apply addition and subtraction strategies to solve problems within 12
60	**Students will:** • Participate in Calendar Math activities • Count by ones and tens up to 100 • Read and write numerals up to 100 • Apply understanding of counting and quantity to play math games and activities

Chapter Preparation for the Teacher

- In Lesson 60, students will celebrate counting to 100 by playing games and doing activities in which they practice counting by 1's and 10's to 100. Preview the lesson and familiarize yourself with the games and activities to decide which ones you would like to do. Gather the materials you will need for each in advance. The materials you need are included in the game description.

Lesson 51 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Compare objects in a set to identify one that does not belong
- Analyze number patterns in the hundreds chart
- Count by ones up to 100

KEY VOCABULARY

- Compare
- Different
- Pattern
- Same

LESSON PREPARATION FOR THE TEACHER

- Gather 3 sets of 4 objects for students to classify. In each set, 4 items should be alike and 1 should be different. Students will compare the items and identify the one that does not belong. For example, 3 shoes and an apple; 3 kinds of vegetables and 1 fruit; 3 red items and 1 blue item; 3 toy animals and 1 toy truck. Select items that are easily available.
- Gather sets of 50 counters for each small group of students. Each small group will need about 50 counters. Examples: beans, dry pasta, small stones, math counters, connecting cubes.
- Print out or create a Hundreds chart for the Learn segment. You will need one per small group (depending on what you can provide).

MATERIALS

Calendar Math Area



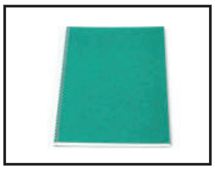
Three sets of 4 objects to compare (See Lesson Preparation for the Teacher for instructions.)

Hundred Chart (large one in Calendar Math Area) plus copies for each small group

Sets of 50 counters (one set per small group of students)



Math Journal



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws and we bundled our new set of 10 together. Now we have 5 sets of 10's in the Tens pocket and 0 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there is 1. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straw: 51.

TEACHER SAY: **Now we have 51 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 51 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 51 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 51 on the number chart and sits down.

TEACHER SAY: **_____ drew a circle around the number 51 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Before we go on to learn our new numbers, let's take a look at some items to see how much we've learned about comparing and classifying. I'm going to show you four objects. Look at them and think about them, but don't say anything. I want you to figure out which object doesn't belong in the group and why it doesn't belong. Remember, don't say anything yet!**

TEACHER DO: Show students the first set of objects. Give students 30-60 seconds to view and think about the items.

STUDENTS DO: Look at objects and think about which one doesn't belong. Determine why it doesn't belong.

TEACHER SAY: **If you think you know which objects doesn't belong and why it doesn't belong, whisper it into your hand.**

STUDENTS DO: Whisper their answer into their hands.

TEACHER DO: Take note of students who do not whisper into their hands. Use **Calling Sticks** to select students to share their thinking.

STUDENTS DO: Share their thinking with their classmates, explaining which object doesn't belong and why.

TEACHER DO: If necessary, ask questions to help students figure out how three of the objects are alike and one is different. Then, repeat the process with the other two sets of objects.

STUDENTS DO: When asked, whisper their answers into their hands. When called on, explain which objects do not belong and why.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **So far we have studied our numbers from 1-40! We've been learning one or two new numbers every day, but I think you are ready to take a shortcut. Who remembers what a pattern is?**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on students with hands raised to answer the question. If necessary, remind students that patterns repeat. When they see something repeat over and over again, it is a pattern.

TEACHER SAY: **Every day we look at our number chart and we circle numbers and count together. Have any of you ever noticed any patterns on the chart? Turn to your Shoulder Partner and talk to each other about any patterns you've seen. If you haven't seen any, it's okay. We'll talk about some today!**

STUDENTS DO: Turn and talk to their shoulder partners about any patterns they have seen in the number chart.

TEACHER DO: Call on students with raised hands to share their thinking about patterns they have seen in the number chart.

STUDENTS DO: Share their ideas with classmates and the teacher.

2. TEACHER SAY: **Let's take a closer look at the hundreds chart and investigate some patterns.**

TEACHER DO: Hand out number charts and bags of counters to small groups of students.

TEACHER SAY: **I'm going to give you some directions and you and your classmates will use your counters to cover some numbers on your number chart. Then we'll talk about patterns that you see.**

TEACHER DO: Give students the directions below (TEACHER SAY) one at a time.

TEACHER SAY:

- **Cover all of the numbers that contain a 5.**
- **Cover all numbers with two identical digits (example: 33)**
- **Cover all of the numbers that contain a 0.**
- **Cover all numbers with a first digit that is larger than the second digit.**

STUDENTS DO: For each direction, have students cover the numbers, investigate patterns, and discuss their findings. After each investigation, students clear their number charts and wait for the next direction from the teacher.

TEACHER DO: Have students put the counters away or move them to the side.

3. TEACHER SAY: Almost every day we've been learning new numbers. We look at them on the ten frames, we talk about how many tens and ones, we count up to them, we sky write them, and we write them in our journals. The last number we learned about and practiced was 40. Take a look at your number chart. What are the next three numbers will we be learning next? How do you know? Raise your hand if you think you know.

STUDENTS DO: Look at the number chart with their classmates to identify the next three numbers they will be learning.

TEACHER DO: Call on students with raised hands to answer the question and explain their thinking.

4. TEACHER SAY: The next three numbers we will learn are 41, 42, and 43. But I mentioned a shortcut earlier. Let me ask you another question: Once we get to 50, what are the next three numbers we would learn? How do you know? Raise your hand if you think you know.

STUDENTS DO: Look at the number chart with their classmates to identify the next three numbers they will be learning.

TEACHER DO: Call on students with raised hands to answer the question and explain their thinking.

TEACHER SAY: Is anyone starting to figure out how we can take a shortcut to learning about numbers up to 99? I'll ask you one more question: Once we get to 80, what are the next three numbers we would learn? How do you know? Raise your hand if you think you know.

STUDENTS DO: Look at the number chart with their classmates to identify the next three numbers they will be learning.

TEACHER DO: Call on students with raised hands to answer the question and explain their thinking.

STUDENTS DO: Selected students answer and explain their thinking

TEACHER SAY: I think we can take a shortcut and use our numbers chart to learn the numbers up to 100. We already know how to write the digits 0-9, we just need practice figuring out to write them to create new numbers like 45, 62, 87, and 91. Let's finish up today by reading the numbers chart all the way from 1 to 100 together. I will point and count. You look at your chart or the big number chart and count aloud with me.

TEACHER DO: Point to 1 on the number chart and start counting. Count all numbers. Emphasize the repetition of the ones as you count each row (example, forty-one, forty-two, forty-three, forty-four… fifty-one, fifty-two, fifty-three, fifty-four, etc.)

STUDENTS DO: Count aloud with the teacher from 1 to 100 using the number chart.

TEACHER SAY: Great job! We'll look at the number chart again tomorrow and talk about new numbers. We'll also be talking about time and exploring more addition and subtraction strategies over the next several days.

Share (5 mins)

Directions

1. **TEACHER SAY: When we were working with our numbers charts, did you notice any patterns we didn't talk about? Talk about it with your Shoulder Partner.**

STUDENTS DO: Turn and talk to their shoulder partners about any other patterns they noticed in the number chart.

TEACHER SAY: Raise your hands to share your thinking.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students to share their thinking. Praise students who identified patterns in the number chart.

Lesson 52 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count by ones to 100.
- Compare objects in a set to identify one that does not belong
- Apply strategies to add and subtract within 10
- Tell time to the hour on an analog clock

KEY VOCABULARY

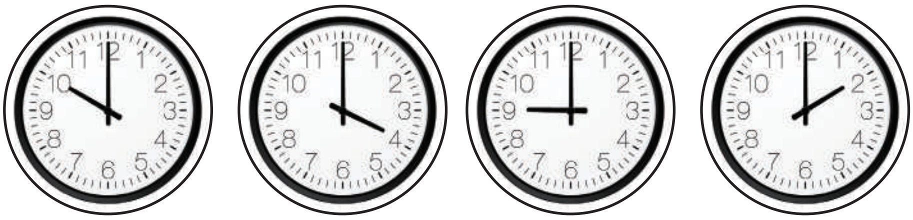
- AM
- Analog clock
- Compare
- Digital clock
- Hands
- Hour
- PM





LESSON PREPARATION FOR THE TEACHER

- Gather 3 sets of 4 objects for students to classify. In each set, 4 items should be alike and 1 should be different. Students will compare the items and identify the one that does not belong. For example, 4 kinds of flowers and a twig; 4 kinds of fruits and 1 vegetable; 4 different green items and 1 yellow item; 4 different toy trucks and 1 toy truck. Select items that are easily available.
- Have a 1-100 number chart for pairs or groups of students.
- Images of analog and digital clocks. (Examples shown below.)
- Images of analog clocks showing time to the hour.
    - If there is a real or teaching analog clock available, use it to help students tell time to the hour and see how the hands move over time.
    - If you have access to a printer or copier, make multiple copies of blank analog clocks.



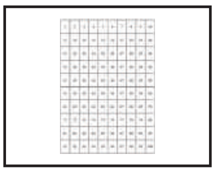
MATERIALS

Calendar Math Area



Three sets of 4 objects to compare (See Lesson Preparation for the Teacher for instructions.)

1-100 number charts (one per pair or small group)

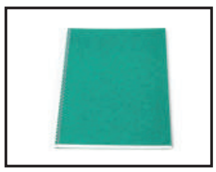


Analog clock faces showing time to the hour (or teaching clock (See Lesson Preparation for the Teacher for instructions and examples.)

Images of analog and digital clock



Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 1 straw in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 2. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 52.

TEACHER SAY: **Now we have 52 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 52 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 52 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 52 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 52 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Let's keep counting to 100. We'll start at 53.**

STUDENTS DO: Count from 53 to 100 with the teacher.

TEACHER DO: Emphasize the repetition of the ones as you count each row (example, fifty-one, fifty-two, fifty-three, fifty-four,… sixty-one, sixty-two, sixty-three, sixty-four, etc.)

4. TEACHER SAY: **Yesterday, we compared objects to identify which object didn't belong in the group. Let's try it again! I'm going to show you four objects. Look at them and think about them, but don't say anything. Figure out which object doesn't belong in the group and why it**

doesn't belong. Remember, don't say anything yet!

TEACHER DO: Show students the first set of objects. Give students 30-60 seconds to view and think about the items.

STUDENTS DO: Look at objects and think about which one doesn't belong. Determine why it doesn't belong.

TEACHER SAY: If you think you know which objects doesn't belong and why it doesn't belong, whisper it into your hand.

STUDENTS DO: Whisper their answer into their hands.

TEACHER DO: Take note of students who do not whisper into their hands. Use **Calling Sticks** to select students to share their thinking.

STUDENTS DO: Share their thinking with their classmates, explaining which object doesn't belong and why.

TEACHER DO: If necessary, ask questions to help students figure out how three of the objects are alike and one is different. Then, repeat the process with the other two sets of objects.

STUDENTS DO: When asked, whisper their answers into their hands. When called on, explain which objects do not belong and why.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday, we looked at our hundreds number chart to find patterns that would help us learn new numbers. You did such a great job at that! Today, we'll use our number charts in a different way – to help us with addition and subtraction. We've already used number lines to help us with addition and subtraction. We can use the number chart in a similar way.

TEACHER DO: Hand out number charts to pairs of students or small groups. Hand out math journals and ask students to open them to the next blank page.

TEACHER SAY: Let's try an addition problem together.

TEACHER DO: Write on the board: 3 + 6 = ______

TEACHER SAY: Write the problem in your journal. Find 3 on your number chart.

STUDENTS DO: Write the problem in their journals. Find 3 on the number chart.

TEACHER SAY: We are going to add 6 to 3. Where do we start? Which way should we go to find the answer – forward or backward? How do you know? Talk to your Shoulder Partner.

STUDENTS DO: Talk to shoulder partners about where to start and which way to go on the number chart to find the answer.

TEACHER SAY: Raise your hands to share your thinking.

TEACHER DO: Call on students with raised hands.

STUDENTS DO: Explain where to start (3), which direction to go, and how they know. Possible answers may include: When we add, the numbers get larger, we have to move in the direction in which the numbers get larger.

TEACHER DO: As needed, confirm that we start at 3 and explain why we move in the direction of the growing numbers. Put finger on 3.

TEACHER SAY: How many are we going to add to 3?

STUDENTS DO: Respond together: 6.

TEACHER SAY: So I make 3 jumps on my number chart – 4, 5, 6, 7, 8, 9. 3 + 6 = 9! Write the answer in your journals.

TEACHER DO: Add the answer to the problem on the board.

STUDENTS DO: Add the answer to the problem in their journals.

2. TEACHER SAY: Let's try another one. Write this problem in your journal.

TEACHER DO: Write 8 – 4 = ______ on the board.

STUDENTS DO: Write the math problem in their journals.

TEACHER SAY: We are going to subtract 4 from 8. Where do we start? Which way should we go to find the answer – forward or backward? How do you know? Talk to your Shoulder Partner.

STUDENTS DO: Talk to shoulder partners about where to start and which way to go on the number chart to find the answer.

TEACHER SAY: Raise your hands to share your thinking.

TEACHER DO: Call on students with raised hands.

STUDENTS DO: Explain where to start (8), which direction to go, and how they know. Possible answers may include: When we subtract, the numbers get smaller, we have to move in the direction in which the numbers get smaller.

TEACHER DO: As needed, confirm that we start at 8 and explain why we have to move in the direction of the shrinking numbers. Put finger on 8.

TEACHER SAY: So we start at 8. How many are we going to subtract?

STUDENTS DO: Respond together: 4.

TEACHER SAY: So I make 4 jumps back on my number chart – 7, 6, 5, 4. 8 – 4 = 4! Write the answer in your journals.

TEACHER DO: Add the answer to the problem on the board.

STUDENTS DO: Add the answer to the problem in their journals.

3. TEACHER SAY: Let's try one on your own. You and your partner (or group) have to figure out which way to go to find the answer. Write this problem in your journal.

TEACHER DO: Write 2 + 7 = ______ on the board. Give students a few minutes to use their number charts to solve the problem. Ask volunteers to share their answers and show what they did to solve the problem. Record the answer on the board and direct students to do the same in their journals.

STUDENTS DO: Solve the problem with their partners (or small groups). Record the answer in their journals. If selected, show how they solved the problem.

TEACHER SAY: Now we know how to use objects, drawings, acting out, counting on, number lines, and number charts to solve addition and subtraction problems. In our next math lesson, we'll use our number charts to solve more addition and subtraction problems!

4. TEACHER DO: Transition to talking about telling time.

TEACHER SAY: **Let's talk about something new: time. What do you already know about time? Turn and talk to your Shoulder Partner about what you know about time.**

STUDENTS DO: Tell their partners everything they know about time.

TEACHER DO: Using **Calling Sticks**, select a few students to share their answer. Take note of misconceptions.

TEACHER SAY: **There are specific times of the day that we do things, so knowing how to tell time helps us in a lot of ways! We have a time to wake up. We have to be at school at a certain time. We eat dinner at a certain time. We may have a doctor's appointment at a certain time. What tools do we use to tell time?**

STUDENTS DO: Raise hands to respond. Selected students share answers, which may include: clock, watch, phone.

5. TEACHER SAY: **That's right! We use clocks and watches to help us tell time. We are going to learn about two different types of clocks: a digital clock and an analog clock.**





TEACHER DO: Display the images of clocks and tell students which is analog and which is digital.

TEACHER SAY: **Today we will look at how to tell time using an analog clock. Can you say analog clock?**

STUDENTS DO: Say analog clock with the teacher.

TEACHER SAY: **An analog clock shows numbers and has two "hands." The shorter hand (or little hand) points to hours. The longer hand (or big hand) points to minutes. The numbers are the hours. Does anyone know how many hours there are in one day? Raise your hands if you think you know.**

STUDENTS DO: Raise hands to volunteer. Selected students answer the question.

TEACHER SAY: **One day has a total of 24 hours in it. Can you repeat this after me? A day has 24 hours.**

STUDENTS DO: Repeat the sentence.

TEACHER SAY: **Does the analog clock count up to 24?**

STUDENTS DO: Respond together: No.

TEACHER SAY: **Yes, it only counts up to 12! Every day, the little hand goes from 12 to 12 once – that is the middle of the night when we are asleep and the morning. Then it goes from 12 to 12 again – that is the afternoon, evening, and night. But what if I told you we were going to have a party at 8 o'clock. How would you know if the party was 8 o'clock in the morning or at night?**

In the morning we say AM! In the afternoon and evening, we say PM! So, I would say, "The party begins at 8 PM and you would know I mean 8 o'clock at night." Let's practice telling time together.

6. TEACHER DO: Display an analog clock and ask students to identify what number the little hand is pointing at.

STUDENTS DO: Respond together.

TEACHER SAY: **The little hand is pointing at ______. What number is the big hand pointing at?**

STUDENTS DO: Respond together: 12.

TEACHER SAY: **That means the time is exactly ______ o'clock. Now you say it.**

STUDENTS DO: Repeat the time.

TEACHER DO: Show students several examples of analog clocks and ask them to identify the time. Take note of students who seem to be struggling with the concept.

STUDENTS DO: Look at analog clocks and tell the time to the hour. Ask questions to clear up confusion. Respond to the teacher's questions.

TEACHER SAY: **We'll look at the clock again tomorrow!**

Share (5-10 mins)

Directions

1. **TEACHER SAY:** **To share today, I want you to turn to your Shoulder Partner and tell them what time (hour only) that you eat dinner. For example. I might say: My family eats dinner at 9 o'clock. If you are unsure of when you eat dinner, you can make your best guess. Be sure to use "o'clock" in your response. (Use a different example, if you prefer.)**

STUDENTS DO: Tell their shoulder partner what time they eat dinner using "o'clock".

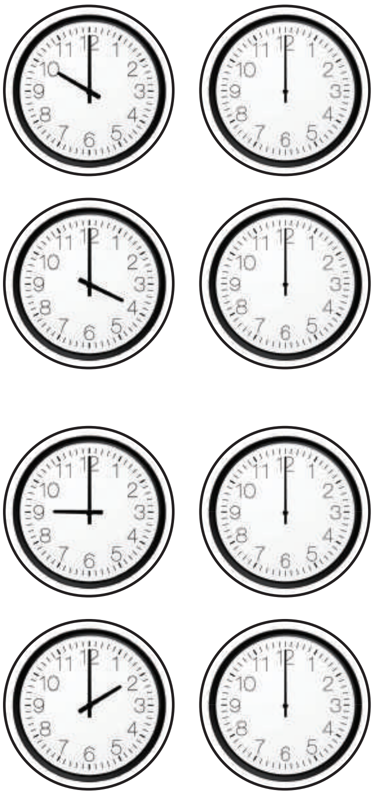
TEACHER DO: Walk around the room and observe students as they share.

TEACHER DO: Using **Calling Sticks**, select a few students to share their answer.

STUDENTS DO: Selected students share their answer with the class.

Lesson 53 Overview

OUTCOMES	KEY VOCABULARY
Students will: • •Participate in Calendar Math activities • Count by ones to 100 • Apply strategies to add and subtract within 10 • Read and write time to the hour on an analog clock • Collect data to create a picture graph	• AM • Analog clock • Colon • Data • Graph • Hands • Hour • Picture graph • PM



LESSON PREPARATION FOR THE TEACHER

- Have a 1-100 number chart for pairs or groups of students.
- Images of analog clocks showing time to the hour.
  - Option: If there is a real or teaching analog clock available, use it to help students tell time to the hour and see how the hands move over time.
  - Option: If you have access to a printer or copier, make multiple copies of blank analog clocks.
- Worksheet with 8-10 blank clock faces showing big hand pointing to 12 and times to the hour written underneath. Example shown below.
  - Option: Have students come up and show time to the hour using a teaching clock.
  - Option: Have students come up and draw little hands on clocks you have drawn on the board or
- Create a graph called Favorite Addition and Subtraction Strategies. Along the bottom axis of the graph, write number line, drawings/objects, and number chart (example shown below). Students will record data using X's.

Favorite Addition and Subtraction Strategies

number line   drawings/objects   number chart

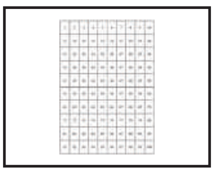
MATERIALS

Calendar Math Area



4-5 analog clock faces showing time to the hour (or teaching clock)

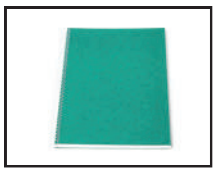
1-100 number charts (one per pair or small group)



Worksheet of 8-10 blank clock faces with the big hand pointing at the 12 (See Lesson Preparation for the Teacher for instructions and examples.)

Graph called Favorite Addition and Subtraction Strategies (See Lesson Preparation for the Teacher for instructions.)

Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using Calling Sticks, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 2 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 3. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 53.

TEACHER SAY: Now we have 53 straws. What does that tell us?

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 53 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 53 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 53 on the number chart and sits down.

TEACHER SAY: ______ drew a circle around the number 53 on the number chart. Let's count the numbers we have circled on our number chart so far.

STUDENTS DO: Count along with the teacher.

7. TEACHER SAY: Let's keep counting to 100. We'll start at 54.

STUDENTS DO: Count from 54 to 100 with the teacher.

TEACHER DO: Emphasize the repetition of the ones as you count each row (example, fifty-one, fifty-two, fifty-three, fifty-four,… sixty-one, sixty-two, sixty-three, sixty-four, etc.)

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals.

TEACHER SAY: Let's review counting using our number chart. Today, let's count to 100 together. Point to each number as you count aloud with me.

TEACHER DO: Count from 1 to 100 aloud, pointing to each number.

STUDENTS DO: Count aloud with teacher from 1-100 using the number chart.

TEACHER SAY: Great job! Now let's use our number charts to help us add and subtract. Open your math journals to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

2. TEACHER SAY: Write this problem in your journal.

TEACHER DO: Write 1 + 7 = ______ on the board. Give students a few minutes to use their number charts to solve the problem. Ask volunteers to share their answers and show what they did to solve the problem. Record the answer on the board and direct students to do the same in their journals.

STUDENTS DO: Record the problem in their journals. Solve the problem with their partners (or small groups). Record the answer in their journals. If selected, show how they solved the problem.

TEACHER DO: Repeat the process for 3-4 more addition and subtraction problems. Examples included below, but use your own examples, if you prefer.

- 7 – 6 = ______
- 3 + 3 = ______
- 4 + 5 = ______
- 9 – 7 = ______
- 8 – 5 = ______

3. TEACHER SAY: Now I'm going to give you a challenge problem! Use your number chart to help you solve it. Write the problem in your math journal.

TEACHER DO: Write the following problem on the board:

- 37 – 5 = ______

STUDENTS DO: Record the problem in their journals. Solve the problem with their partners (or small groups). Record the answer in their journals. If selected, show how they solved the problem.

TEACHER SAY: Amazing! Even though 37 is a big number, you were able to use your number chart to help you solve the problem! Give yourself a pat on the back!

STUDENTS DO: Pat themselves on the back.

4. TEACHER SAY: We're going to practice telling time again today, but first let's Sky Write some numbers together. Stand and Sky Write numbers 40-49 with me.

STUDENTS DO: Stand and Sky Write number 40-49 with the teacher.

5. TEACHER SAY: Great work! Our number chart helps us learn and write new numbers, too! Now it's time for time. What did we learn about time and telling time yesterday?

STUDENTS DO: Raise hands to volunteer. Selected students share their learning from yesterday. Possible answers might involve hours, AM, PM, analog, clocks, watches, phones, o'clock, morning, afternoon, evening, and night, big hands, and little hands.



TEACHER DO: Congratulate students on their learning. Display an analog clock face showing a time to the hour. Example shown below.

TEACHER SAY: What time is this clock showing? How do you know? Whisper your answer into your hands.

STUDENTS DO: Whisper the answer into their hands.

TEACHER DO: Call on students to answer the question.

STUDENTS DO: Selected student tells the time and explains how they know.

6. TEACHER SAY: We can write the time in two different ways.

TEACHER DO: Write 7 o'clock and 7:00 on the board. Explain that both are read as "7 o'clock." Point to the colon in 7:00.

TEACHER SAY: These dots are called a colon. The colon separates the hours and minutes. The number before the colon is the hour. The numbers after the colon is the minutes. When the minutes say 00, it is the exact hour. In this example, it says exactly 7 o'clock.

TEACHER DO: Show students 3-4 more examples and ask them to tell the time and explain how they know. For each example, have a student (the same one who told the time or a different volunteer) write the time on the board.

STUDENTS DO: Selected students tell the time and explain how they know. Volunteer writes the time on the board.

7. TEACHER SAY: Great work! Now we're going to look at time a different way. I'm going to hand out a sheet with some blank clocks. Under each clock is a time. Draw a little hand onto each clock to show the time underneath. Remember, the little hand points to the hour. The big hand showing the minutes is already drawn for you.

STUDENTS DO: Work independently to draw little hands on clocks to show time to the hour.

TEACHER DO: As students are working, walk around the room to monitor their work. Take note of students who may need additional instruction. When students are finished, go over the answers together.

STUDENTS DO: Review the correct answers with the teacher. Correct their work, as needed.

Share (5-10 mins)

Directions

1. TEACHER SAY: We have been learning a lot of strategies for adding and subtracting. I'd like to collect some data – or information – about your favorites. Look at this graph I've drawn. Along the bottom, I've listed written three strategies: number line, objects/drawing, and number chart. Think about which strategy is your favorite strategy to use when you add or subtract.

STUDENTS DO: Think about their favorite addition/subtraction strategy.

TEACHER DO: Each student will write an X above their favorite strategy. Consider how you would like to organize students to do that (example: line up, call students up by table). Model how big you would like students to write their X's. As students are writing their X's, remind them to try to write their X's the same size as yours.

TEACHER SAY: Great job making the graph! We'll talk about it tomorrow during Share.

Lesson 54 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count by ones and tens to 100
- Read and write numbers 40-49
- Read and write time to the hour on analog and digital clocks
- Answer questions about data in a picture graph

KEY VOCABULARY

- Analog clock
- Colon
- Compare
- Data
- Digital clock
- Hands
- Hour
- Picture graph

LESSON PREPARATION FOR THE TEACHER

- Have a 1-100 number chart for each pair of students.
- For whole group review, have several analog clock faces showing times to the hour and clock faces showing only the big hand. See Lesson Preparation for Day 53 for examples.
- Have available an image of a digital clock (or a real digital clock). Example shown below.



- For whole group instruction, have 4-5 examples of digital clocks showing various times to the exact hour. Examples shown below.

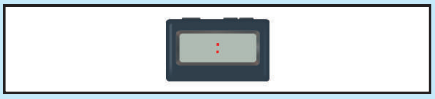








- Create or print out blank templates of digital clocks. Example shown below.



- Have available the completed graph called Favorite Addition and Subtraction Strategies.

MATERIALS

Calendar Math Area



For whole class review: several clock faces showing times to the hour and clock faces showing only the big hand (or teaching clock)

1-100 number charts (one per pair of students)

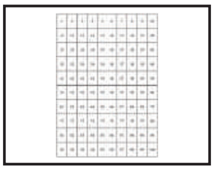
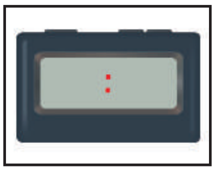


Image of digital clock (or real digital clock)



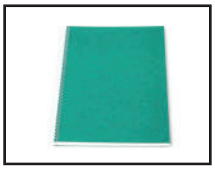
4-5 digital clock faces showing time to the hour (See Lesson Preparation for the Teacher for instructions and examples)

Blank templates of digital clocks



Completed graph called Favorite Addition and Subtraction Strategies (See Lesson Preparation for the Teacher for instructions.)

Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 3 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 4. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 54.

TEACHER SAY: **Now we have 54 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 54 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 54 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 54 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 54 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Let's continue counting up to 100. We'll start with 55.**

STUDENTS DO: Count along with the teacher.

TEACHER DO: Emphasize the repetition of the ones as you count each row (example, fifty-one, fifty-two, fifty-three, fifty-four,… sixty-one, sixty-two, sixty-three, sixty-four, etc.)

TEACHER SAY: **Great job! We can use the number chart to help us count by 10's too! Find 10 on the number chart.**

STUDENTS DO: Find 10 on the number chart.

TEACHER SAY: Look at all the numbers in that column. They all end in zero! If we count using that column, we will count from 10 to 100. Let's try it.

TEACHER DO: Count from 10 to 100 aloud by 10's, pointing to each number.

STUDENTS DO: Count aloud with teacher from 10 to 100 using the number chart.

TEACHER SAY: Wonderful! Now we can count to 100 by 1's and 10's! Give yourself a pat on the back!

STUDENTS DO: Pat themselves on the back.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and number charts to partners. Have students open their journals to the first blank page.

TEACHER SAY: We're going to practice telling time again today, but first let's practice writing some numbers together. Stand and Sky Write numbers 40-49 with me.

STUDENTS DO: Stand and Sky Write numbers 40-49 with the teacher.

TEACHER SAY: Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.

STUDENTS DO: Write numbers 40-49 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

2. TEACHER SAY: Great work! Our number chart helps us learn, count, write, and compare numbers! Now it's time for time. What have you learned about time and telling time?

STUDENTS DO: Share what they've learned about telling time.

TEACHER DO: Review telling time to the hour on analog clocks by having students identify the time on a clock and drawing little hands on clocks to show a given time (as they did in Learn in the previous lesson).

STUDENTS DO: Review telling time by telling time or showing time when called on by the teacher.

TEACHER SAY: The first day we talked about time, we looked at two different kinds of clocks. The clock we've been looking at is called an analog clock. Do you remember what the other kind of clock was called?

STUDENTS DO: Raise hands to answer the question. Selected students answer the question.

TEACHER DO: Show students a picture of a digital clock (or a real digital clock).

TEACHER SAY: The other kind of clock is called a digital clock. What do you notice about the digital clock?

STUDENTS DO: Raise hands to respond. Selected students share their observations. Possible answers include: not round, no hands, shows numbers, has a colon, lights up.

TEACHER SAY: **This kind of clock is called digital because it shows the time using digits, or numbers. It does not have hands. It is very simple to tell the time on a digital clock. The numbers on this side of the colon tell the hours. The numbers on this side of the colon tell the minutes. We're only working on hours right now, so for now we'll look at this side of the colon to tell the time.**

When we look at an analog clock, how do we know it is the exact hour (with no minutes)?

STUDENTS DO: Raise hands to respond. Selected student explains that the big hand is pointing at the 12.

3. TEACHER SAY: **On the digital clock, we can tell it is the exact hour (with no minutes) because this side of the clock shows 00 – or zero minutes. Let's practice telling time on a digital clock.**

TEACHER DO: Display a digital clock face showing time to the hour.

TEACHER SAY: **What time do you think this clock is showing?**

STUDENTS DO: Raise hands to respond. Selected students answer the question.

TEACHER SAY: **This clock shows the time ______. The hour ___ is before the colon. The minutes 00 are after the colon. So, it is ____ o'clock. Let's look at another one. Raise your hand if you know what time it says.**

TEACHER DO: Display another digital clock face showing time to the hour.

STUDENTS DO: Raise hands to respond. Selected students answer the question.

TEACHER DO: Correct students as needed. Repeat the practice for the remaining examples. Hand out math journals and have students open them to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

4. TEACHER SAY: **I'm going to give you a time. I want you to write it in your math journal like a digital clock. For example, if I said, "Show me what eight o'clock would look like on a digital clock," you would write this.**

TEACHER DO: Write 8:00 on the board. Ask students if they have any questions.

STUDENTS DO: Raise hands to ask questions, if needed.

TEACHER DO: Give students 4-5 times to practice writing. For example:

- 3 o'clock
- 11 o'clock
- 2 o'clock
- 7 o'clock
- 12 o'clock

STUDENTS DO: Write each time in digital format and hold up journals when asked by the teacher.

TEACHER DO: Walk around and monitor students' work. Take note of students who may need additional instruction.

TEACHER SAY: **Good job! Tomorrow, we'll look at analog and digital clocks together!**

Share (5-10 mins)

Directions

1. **TEACHER DO:** Display the completed class graph Favorite Addition and Subtraction Strategies.

TEACHER SAY: In our last Share session, we collected data about your favorite addition and subtraction strategies. Each of you recorded your data on the graph using an X. I'd like to know how many people voted for number line. How can we find out?

STUDENTS DO: Respond together: Count the X's.

TEACHER SAY: Let's count them together!

STUDENTS DO: Count the X's aloud with the teacher.

TEACHER DO: Write the number on the graph.

TEACHER SAY: How many people voted for using objects/drawing as their favorite strategy?

STUDENTS DO: Count the X's aloud with the teacher.

TEACHER DO: Write the number on the graph.

TEACHER SAY: And how many people voted for using number charts as their favorite strategy?

STUDENTS DO: Count the X's aloud with the teacher.

TEACHER DO: Write the number on the graph.

TEACHER SAY: How many people voted all together?

STUDENTS DO: Count all of the X's aloud with the teacher.

TEACHER SAY: You did a good job looking at our data and answering questions. We'll look at the data in a different way tomorrow.

Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count by ones and tens to 100
- Read and write numbers 50-59
- Read and write time to the hour on analog and digital clocks
- Apply the ten-frame structure as a way to represent quantities
- Solve subtraction problems to create fact families
- Answer questions about data in a bar graph

KEY VOCABULARY

- Bar graph
- Data
- Fact family

LESSON PREPARATION FOR THE TEACHER

- Create or print out ten frames (one per student).
- Gather sets of 10 small objects to use as counters (one set per student) Examples: beans, dry pasta, small stones, math counters, connecting cubes
- Create or print a worksheet of subtraction facts families (example shown below). Alternatively, students can copy the problems into their math journals. They will not work on all of the problems in one day, so they can copy each set as they go.

1 Family 1 - 0 = ______ 1 - 1 = ______	2 Family 2 - 0 = ______ 2 - 1 = ______ 2 - 2 = ______	3 Family 3 - 0 = ______ 3 - 1 = ______ 3 - 2 = ______ 3 - 3 = ______	4 Family 4 - 0 = ______ 4 - 1 = ______ 4 - 2 = ______ 4 - 3 = ______ 4 - 4 = ______	5 Family 5 - 0 = ______ 5 - 1 = ______ 5 - 2 = ______ 5 - 3 = ______ 5 - 4 = ______ 5 - 5 = ______
6 Family 6 - 0 = ______ 6 - 1 = ______ 6 - 2 = ______ 6 - 3 = ______ 6 - 4 = ______ 6 - 5 = ______ 6 - 6 = ______	7 Family 7 - 0 = ______ 7 - 1 = ______ 7 - 2 = ______ 7 - 3 = ______ 7 - 4 = ______ 7 - 5 = ______ 7 - 6 = ______ 7 - 7 = ______	8 Family 8 - 0 = ______ 8 - 1 = ______ 8 - 2 = ______ 8 - 3 = ______ 8 - 4 = ______ 8 - 5 = ______ 8 - 6 = ______ 8 - 7 = ______ 8 - 8 = ______	9 Family 9 - 0 = ______ 9 - 1 = ______ 9 - 2 = ______ 9 - 3 = ______ 9 - 4 = ______ 9 - 5 = ______ 9 - 6 = ______ 9 - 7 = ______ 9 - 8 = ______ 9 - 9 = ______	10 Family 10 - 0 = ______ 10 - 1 = ______ 10 - 2 = ______ 10 - 3 = ______ 10 - 4 = ______ 10 - 5 = ______ 10 - 6 = ______ 10 - 7 = ______ 10 - 8 = ______ 10 - 9 = ______ 10 - 10 = _____

MATERIALS

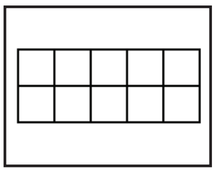
Calendar Math Area



Addition Fact Family worksheets (completed in previous lessons)

Subtraction Fact Family worksheets (See Lesson Preparation for the Teacher for instructions.)

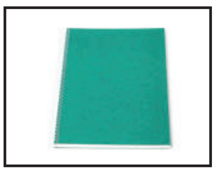
Ten Frames (one per student)



Sets of 10 counters (one set per student)



Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

4. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 4 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 5. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 55.

TEACHER SAY: Now we have 55 straws. What does that tell us?

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 55 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 55 to show how many numbers we have been in school.

STUDENTS DO: Calendar Helper circles 55 on the number chart and sits down.

TEACHER SAY: ______ drew a circle around the number 55 on the number chart. Let's count the numbers we have circled on our number chart so far.

STUDENTS DO: Count along with the teacher.

5. TEACHER SAY: Let's keep counting to 100 together! We will start at 56.

STUDENTS DO: Count aloud with the teacher from 56 to 100.

TEACHER SAY: Now, let's count by 10's up to 100. We can use the number chart to help us.

STUDENTS DO: Count by 10's up to 100 with the teacher.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the first blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: You did such a great job counting! Let's practice Sky Writing more numbers today. Stand up and get ready. Let's Sky Write numbers 50-59 together.

STUDENTS DO: Stand and sky write numbers 50-59 with the teacher.

TEACHER SAY: Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.

STUDENTS DO: Write numbers 50-59 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

2. TEACHER SAY: Great job! Let's practice telling time together. Today you're going to be the clock!

TEACHER DO: Draw a clock face on the chalkboard showing where all of the numbers are (no hands).

TEACHER SAY: I'm going to call on some of you to help. Be ready! For each time, I will call on two of you. One of you will use your arms to show the time as an analog clock. For example, I'm going to show 3:00 using my arms.

TEACHER DO: Model how to look at the clock and find the 12 and the 3. Stand and hold arms so they are pointing at the 3 and the 12.

TEACHER SAY: One of you will write the time as a digital clock.

TEACHER DO: Write 3:00 on the board. Use **Calling Sticks** to call two students at a time to the board. Give students times to display/write. Repeat 4 more times.

TEACHER SAY: Well done! I'm so proud of the work you're doing to learn math skills!

Let's talk about other important math skills we've been practicing – addition and subtraction. One day, we talked about how addition and subtraction are connected to each other. Who can remember how they are connected to each other? I'll write two problems on the board to help you think about it.

TEACHER DO: Write: 6 + 2 = 8
8 – 6 = 2

STUDENTS DO: Think about how addition and subtraction are connected. Raise hands to volunteer. Selected students share their thinking.

TEACHER SAY: Addition and subtraction are opposites, but if we know that 6 + 2 = 8, we also know 8 – 6 = 2. 6, 2, and 8 are part of the same fact family. Today we are going to work on subtraction fact families and look for patterns.

TEACHER DO: Hand out Subtraction Fact Family worksheets, a ten frame, and a set of 10 counting objects to each student.

TEACHER SAY: Let's do one of the fact families together. We'll do the 4 Family. Take 4 counting objects and put them on your ten frame.

STUDENTS DO: Put 4 objects on their ten frames.

TEACHER SAY: The first problem in the 4 Family is 4 – 0. That means we don't take any objects away. How many do we have left?

STUDENTS DO: Respond together: 4!

TEACHER SAY: Let's write that on our worksheet.

STUDENTS DO: Write 4 as the answer to 4 – 0 = 4.

TEACHER SAY: Let's do the next one: 4 – 1. How many counters do we have to take off of the ten frame?

STUDENTS DO: Respond together: 1.

TEACHER SAY: Do that and write down your answer. Then be sure to put your counter back so you start with 4 again!

STUDENTS DO: Take 1 counter off the ten frame. Write 3 as the answer to 4 – 1 = 3. Put the counter back on the ten frame to make a set of 4.

TEACHER SAY: Do the next fact: 4 – 2. Raise your hand when you're done. Be sure to put the counter back so you start with 4 again!

STUDENTS DO: Solve the problem and record their answer. Raise hands to answer the question. Selected student answers: 2.

TEACHER DO: If necessary, repeat the process for all of the 4 fact family problems. Then, direct students to work on the worksheet starting with any number they like. Allow students to work for about 10 minutes (leave 10 minutes for the Share segment). They will continue to work on the worksheet in the next lesson.

As students work, walk around the classroom to monitor students' progress. Take note of students who need additional help. If time allows, gather those students in a small group to complete some problems together.

TEACHER SAY: You worked so hard today! Good thinking and good work! We will finish our subtraction fact family worksheets tomorrow.

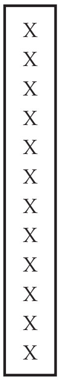
Share (5-10 mins)

Directions

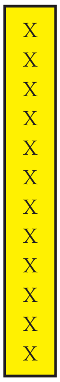
1. **TEACHER DO:** Display the completed class graph Favorite Addition and Subtraction Strategies.

TEACHER SAY: In our last Share session, we collected data about your favorite addition and subtraction strategies. Each of you recorded your data on the graph using an X. I'm going to turn it into a bar graph. Watch me.

TEACHER DO: Draw vertical rectangles around each column of X's. It will look like this:



Next, color in the rectangle to turn the data into a bar. Use a different color for each category. It will look like this:



TEACHER SAY: Now, we have a bar graph. It shows our data in bars. Look at the bars. What strategy is the most popular strategy in our class? What strategy is the least popular in our class? How do you know?

STUDENTS DO: Look at the graph and analyze the data. Answer the teacher's questions and explain how they know.

TEACHER SAY: You did a good job looking at our data and answering questions. We'll take another look tomorrow.

Lesson 56 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 60-69 • Apply the ten-frame structure as a way to represent quantities • Solve subtraction problems to create fact families • Read and write time to the hour on analog and digital clocks	• Analog clock • Colon • Digital clock • Fact family • Hands • Hour	• Create or print out ten frames (one per student). • Gather sets of 10 small objects to use as counters (one set per student) Examples: beans, dry pasta, small stones, math count-ers, connecting cubes

MATERIALS

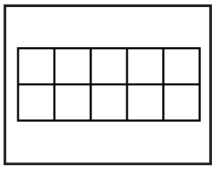
Calendar Math Area



Addition Fact Family work-sheets (completed in previous lessons)

Subtraction Fact Family worksheets (See Lesson Preparation for the Teacher for instructions.)

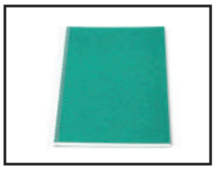
Ten Frames (one per student)



Sets of 10 counters (one set per student)



Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 5 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 6. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 56.

TEACHER SAY: **Now we have 56 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 56 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 56 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 56 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 56 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Great job! Let's keep counting by ones up to 100 as I point. We will start at 57.**

STUDENTS DO: Count by ones from 57 to 100.

TEACHER SAY: **Now let's count by 10's to 100.**

STUDENTS DO: Count by 10's to 100 with the teacher.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Let's practice our numbers a little more. Stand and Sky Write numbers 60-69 with me.**

STUDENTS DO: Stand and sky write numbers 60-69 with the teacher.

TEACHER SAY: **Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.**

STUDENTS DO: Write numbers 60-69 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

TEACHER SAY: **Let's finish our subtraction fact family worksheets.**

TEACHER DO: Hand out a ten frame and a set of counting objects to each student.

STUDENTS DO: Continue to work on their subtraction fact family worksheet. Students who finish early may work with a partner to practice addition and subtraction: Take turns giving each other addition or subtraction problems to solve. Students may use their addition and subtraction fact family sheets to help them.

Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's grab our math journals and turn to the next blank page.**

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Draw an analog clock face on your journal page:

1. **Start with a big circle.**
2. **At the very top of the circle, write 12.**
3. **At the very bottom of the circle, write 6.**
4. **Between the 12 and the 6, write 3.**
5. **Between the 6 and the 12, write 9.**
6. **Between 12 and 3, write 1 and 2.**
7. **Between 3 and 6, write 4 and 5.**
8. **Between 6 and 9, write 7 and 8.**
9. **Between 9 and 12, write 10 and 11.**
10. **You drew a clock!**

STUDENTS DO: Follow the teacher's directions to draw an analog clock face.

TEACHER SAY: What time should we show?

STUDENTS DO: Raise hands to suggest a time.

TEACHER DO: Select a time suggested by a student and direct students to draw it on their clocks and write it using digits like a digital clock.

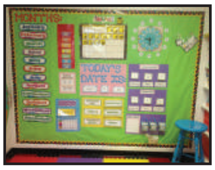
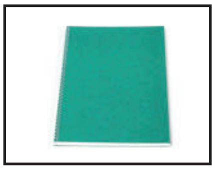
STUDENTS DO: Draw hands on their clock to show the time. Write the time in digital format.

TEACHER SAY: Hold up your journals so I can see them. Great work, everyone!

Lesson 57 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 70-79 • Solve addition problems within 20 • Describe strategies for solving challenging addition problems	• Add (+) • Equal Sign (=) • Strategies • Subtract (-)

MATERIALS

Calendar Math Area		Number charts (one per pair of students
Math Journal		

Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:
- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 6 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 7. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 57.

TEACHER SAY: Now we have 57 straws. What does that tell us?

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 57 days.

TEACHER SAY: My Calendar Helper will draw a circle around the number 57 to show how many days we have been in school.

STUDENTS DO: Calendar Helper circles 57 on the number chart and sits down.

TEACHER SAY: ______ drew a circle around the number 57 on the number chart. Let's count the numbers we have circled on our number chart so far.

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: Great job! Let's keep counting by ones up to 100 as I point. We will start at 58.

STUDENTS DO: Count by ones from 58 to 100.

TEACHER SAY: Now let's count by 10's to 100.

STUDENTS DO: Count by 10's to 100 with the teacher.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out number charts and math journals and have students open them to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Today we're going to Sky Write a new set of numbers and then we're going to write them in our journals. Stand and Sky Write numbers 70-79 with me.

STUDENTS DO: Stand and sky write numbers 70-79 with the teacher.

TEACHER SAY: Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.

STUDENTS DO: Write numbers 70-79 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

2. TEACHER SAY: We've been practicing addition within 10, but I think you're ready to try some more challenging problems. We'll do some together today and you will work with a partner.

Remember when we used our number chart to help us solve addition and subtraction problems – almost like a big number line? We're going to do that again, but with bigger numbers. Which direction do we go on the number chart if we are adding? Why? Which direction do we go on the number chart if we are subtracting? Why?

STUDENTS DO: Raise hands to answer the questions. Selected students share and explain their thinking.

TEACHER DO: If necessary, explain that when we add, the answer is bigger than both of the numbers in the problem, so that is a clue that we have to go in the direction of growing numbers. In subtraction, the answer is smaller than the numbers (or equal to one of them), so that is a clue that we have to go in the direction of shrinking numbers.

TEACHER SAY: **Work with your partner to see if you can solve this problem: 15 + 3.**

TEACHER DO: Write on the board: 15 + 3 = _______. Give students a couple minutes to solve the problem.

STUDENTS DO: Use their number charts to solve the problem with their partners.

TEACHER SAY: **Watch me solve the problem. See if you got it right!**

TEACHER DO: Model solving the problem by doing a think-aloud, starting at 15 on the number chart and moving three spots forward to 18.

TEACHER SAY: **Wave at me if you and your partner got it right.**

STUDENTS DO: Wave at the teacher if they got the correct answer.

3. TEACHER SAY: **Let's try some more.**

TEACHER DO: Give students several more problems (as many as time will allow, leaving 10 minutes for Share). Example problems are below.

- 12 + 4 = _______
- 8 + 7 = _______
- 13 + 6 = _______
- 10 + 10 = _______
- 11 + 5 = _______

STUDENTS DO: Work with partners to solve problems.

TEACHER DO: Check all answers with students together. Have them wave if they got the right answer.

Share (5-10 mins)

Directions

1. TEACHER SAY: **If I asked you to solve a really difficult addition problem like 53 + 5, what would you do? Turn and talk to your Shoulder Partner.**

STUDENTS DO: Turn and talk to their shoulder partners about how they would solve a challenging addition problem.

TEACHER SAY: **I would love to hear your strategies. Raise your hand if you have an idea how to solve that problem.**

STUDENTS DO: Share their ideas.

TEACHER DO: Take note of strategies that are effective and of strategies that may indicate misconceptions or the need for additional instruction and practice.

TEACHER SAY: **We learn so much from each other when you share your mathematical thinking. I love how you use different strategies, tools, and vocabul ary!**

Lesson 58 Overview

OUTCOMES
Students will: • Participate in Calendar Math activities • Count by ones and tens to 100 • Read and write numbers 80-89 • Solve subtraction problems within 20 • Describe strategies for solving challenging addition problems • Apply understanding of time to create a schedule

KEY VOCABULARY
• Add (+) • Equal Sign (=) • Schedule • Strategies • Subtract (-)

LESSON PREPARATION FOR THE TEACHER
• Create a sample schedule (example shown below). Students will add times to the schedule.

Time	Schedule
	Wake up
	Go to school
	Eat lunch
	Go home
	Eat dinner
	Go to bed

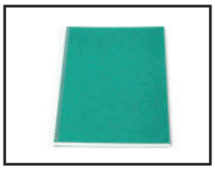
MATERIALS

Calendar Math Area



Number charts (one per pair of students)

Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: Now, _____ is going to help us find out how many days we have been in school!

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 7 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 8. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 58.

TEACHER SAY: **Now we have 58 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 58 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 58 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 58 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 58 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Great job! Let's keep counting by ones up to 100 as I point. We will start at 58.**

STUDENTS DO: Count by ones from 59 to 100.

TEACHER SAY: **Now let's count by 10's to 100.**

STUDENTS DO: Count by 10's to 100 with the teacher.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and number charts to partners. Have students open their journals to the first blank page.

TEACHER SAY: **Let's practice our next set of numbers. Stand and Sky Write numbers 80-89 with me.**

STUDENTS DO: Stand and sky write numbers 80-89 with the teacher.

TEACHER SAY: **Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.**

STUDENTS DO: Write numbers 80-89 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

2. TEACHER SAY: **We've been practicing subtraction within 10, but I think you're ready to try some more challenging problems. We'll do some together today. We will use number charts and work with partners.**

Let's review: Which direction do we go on the number chart if we are subtracting? Why? Which direction do we go on the number chart if we are adding? Why?

STUDENTS DO: Raise hands to answer the questions. Selected students share and explain their thinking.

TEACHER DO: If necessary, explain that when we subtract, the answer is smaller than the numbers (or equal to one of them), so that is a clue that we have to go in the direction of shrinking numbers. When we add, the answer is bigger than both of the numbers in the problem, so that is a clue that we have to go in the direction of growing numbers.

TEACHER SAY: Work with your partner to see if you can solve this problem: 15 - 3.

TEACHER DO: Write on the board: 15 - 3 = ______. Give students a couple minutes to solve the problem.

STUDENTS DO: Use their number charts to solve the problem with their partners.

TEACHER SAY: Watch me solve the problem. See if you got it right!

TEACHER DO: Model solving the problem by doing a think-aloud, starting at 15 on the number chart and move three spots backward to 12.

TEACHER SAY: Wave at me if you and your partner got it right.

STUDENTS DO: Wave at the teacher if they got the correct answer.

TEACHER SAY: Let's try some more.

TEACHER DO: Give students several more problems (as many as time will allow, leaving 10 minutes for Share). Example problems are below.

- 12 - 4 = ______
- 18 - 8 = ______
- 13 - 6 = ______
- 11 - 10 = ______
- 20 - 5 = _______

STUDENTS DO: Work with partners to solve problems.

TEACHER DO: Check all answers with students together. Have them wave if they got the right answer.

TEACHER SAY: Yesterday, I asked you how you would solve a challenging addition problem. Would the strategy you picked work for a challenging subtraction problem? Why or why not?

STUDENTS DO: Raise hands to answer the question. Selected students share their thinking.

Share (5-10 mins)

Directions

1. **TEACHER SAY:** **We've been working on telling time using analog and digital clocks. Why is it important that we know how to tell time?**

STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Call on a few students to share their thinking.

TEACHER SAY: **I like to use time to help me plan my day. Can you help me make a schedule?**

TEACHER DO: Display a schedule like the one below (customize it to fit your preferences). Ask students to help you decide what time (to the hour) each activity should be done. Select different volunteers to write the times in the Time column.

Time	Schedule
	Wake up
	Go to school
	Eat lunch
	Go home
	Eat dinner
	Go to bed

STUDENTS DO: Help the teacher create a schedule by adding times. If selected, write a time on the schedule.

Lesson 59 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count by ones and tens to 100
- Read and write numbers 90-99
- Apply addition and subtraction strategies to solve problems within 12

KEY VOCABULARY

- Add (+)
- Equal Sign (=)
- Strategy
- Subtract (-)

LESSON PREPARATION FOR THE TEACHER

- Gather sets of 12 small objects to use as counters (one set per pair of students) Examples: beans, dry pasta, small stones, math counters, connecting cubes.
- Gather cups (not see-through). Each pair of students will need one.
- Create or print out the Cup Counters Recording Sheet (shown below). If this is not possible, have students create one in their math journals.

Cup Counters

Total Number: ____

Outside	Inside

MATERIALS

Calendar Math Area



Number charts (one per pair of students)

Sets of 12 counters (one set per pair of students)

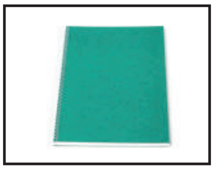


1 cup (not see-through) per pair of students



Cup Counter Recording Sheet (See Lesson Preparation for the Teacher for example and instructions.)

Math Journal



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

2. TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 8 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 9. I'm going to count them, but I'm going to count by 10's. It's faster than counting by ones and I have 5 sets of tens now! Count with me.**

TEACHER DO: Count the straws by 10's, holding up each bundles as you count it.

STUDENTS DO: Count by 10's with the teacher.

TEACHER DO: Count the single straws: 59.

TEACHER SAY: **Now we have 59 straws. What does that tell us?**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student responds: We have been in school 59 days.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 59 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 59 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 59 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Great job! Let's keep counting by ones up to 100 as I point. We will start at 60.**

STUDENTS DO: Count by ones from 60 to 100.

TEACHER SAY: **Now let's count by 10's to 100.**

STUDENTS DO: Count by 10's to 100 with the teacher.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and number charts. Have students open their math journals to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: We have been in school for 59 days and we have learned a LOT of numbers! Today we're going to practice our last group of numbers. We will learn one more very special new one tomorrow. Stand and Sky Write numbers 90-99 with me.

STUDENTS DO: Stand and sky write numbers 90-99 with the teacher.

TEACHER SAY: Now, let's practice writing them in our journals. You can look at your number chart to help you, if you need it. When you are done, check your Shoulder Partner's work.

STUDENTS DO: Write numbers 90-99 in their math journals. Check their shoulder partner's work.

TEACHER DO: Walk around the classroom and monitor students' work. Take note of students who may need additional instruction.

2. TEACHER SAY: Today we're going to practice addition and subtraction in a slightly different way. You will play a game called Cup Counters with a partner. I will explain the rules. I would like ______ (student's name) to help me. Watch as we demonstrate how to play. I will be Player 1. _______ will be Player 2.

1. **Since we are playing with 12 counters, we will write 12 as the Total Number at the top of the paper.**
2. **Player 1 will hide some of the counters under the cup and leave the rest outside the cup so Player 2 can see them.**
3. **Player 2's job is to figure out how many counters are hidden under the cup and tell Player 1.**
4. **Player 1 will then lift the cup and both players will count to see if Player 2 is correct.**
5. **Player 2 will write down the number of counters outside and inside the cup on the recording sheet. What should they add up to? (12)**
6. **Then you'll switch jobs. Player 2 will hide some of the counters under the cup and leave some out. Player 1 will figure out how many are inside.**

Do you have any questions?

STUDENTS DO: Raise hands to ask questions. Selected students will ask the teacher questions to build understanding of how to play the game.

TEACHER DO: Distribute materials to pairs of students.

STUDENTS DO: Play the game Cup Counters.

TEACHER DO: Walk around the classroom to monitor game play. Answer any questions the students have and ask questions to help students correct errors. Take note of students who need additional help. At the end of the Learn segment, collect all counters and cups.

Share (5-10 mins)

Directions

1. **TEACHER SAY:** **Ask students questions such as the following to help them reflect on the game Cup Counters:**
   - **What did you think of the Cup Counters game?**
   - **What strategies did you use to figure out how many counters were hidden?**
   - **Was it frustrating at first or easy?**
   - **What did you do if you were frustrated? Did you keep going or did you want to quit playing?**
   - **What did you learn from the game?**

STUDENTS DO: Share their thinking about the game when called on by the teacher.

Lesson 60 Overview

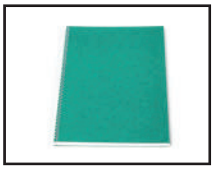
OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count by ones and tens up to 100 • Read and write numerals up to 100 • Apply understanding of counting and quantity to play math games and activities	• In this lesson, students will celebrate counting to 100 by playing games and doing activities in which they practice counting by 1's and 10's to 100. Familiarize yourself with the games and activities to decide which ones you would like to do and gather the materials you will need for each. The materials you need are included in the game descriptions.

MATERIALS

Calendar Area



Math Journal



Calendar (15 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their classmates to repeat:

- The names of all of the months
- The current month
- All days of the week in order
- Today, yesterday, and tomorrow
- Point to the date on the calendar
- Today's date: "Today is (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Now, _____ is going to help us find out how many days we have been in school!**

STUDENTS DO: Calendar Helper take 1 counting stick and place it in the Ones pocket.

TEACHER SAY: **How many straws are in the Ones pocket now? How many straws are in the Tens pocket? Yesterday, there were 50 straws – or 5 groups – in the Tens pocket and 9 straws in the Ones pocket. We added 1 straw to the Ones pocket today, so now there are 10.**

Oh look! We have a set of 10 in our Ones pocket! Who remembers what we do when we have 10 Ones? Whisper the answer into your hand.

STUDENTS DO: Whisper answer into hands.

TEACHER DO: Use **Calling Sticks** to select a student to share their answer.

STUDENT DO: Selected student answers: We bundle them together and move them to the Tens pocket.

TEACHER SAY: **Yes! We bundle them together and move them to our Tens pocket. Now we have 60 straws. 59 and 1 more is 60. I can count these straws by 10's. Count them with me.**

STUDENTS DO: Count aloud by 10's to 60 as the teacher holds up each bundle.

TEACHER SAY: **So, how many days have we been in school?**

STUDENTS DO: Respond together: 60.

TEACHER SAY: **My Calendar Helper will draw a circle around the number 60 to show how many days we have been in school.**

STUDENTS DO: Calendar Helper circles 60 on the number chart and sits down.

TEACHER SAY: **______ drew a circle around the number 60 on the number chart. Let's count the numbers we have circled on our number chart so far.**

STUDENTS DO: Count along with the teacher.

3. TEACHER SAY: **Great job! Let's keep counting by ones up to 100 as I point. We will start at 60.**

STUDENTS DO: Count by ones from 61 to 100.

TEACHER SAY: **Now let's count by 10's to 100.**

STUDENTS DO: Count by 10's to 100 with the teacher.

Learn (40 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

STUDENTS DO: Open journals to the next blank page.

TEACHER SAY: **Today is a very special day! We have been counting from 1 to 100 for several days now, but we haven't ever talked about 100 or written it down. 100 is the same as 10 tens. When we do Calendar Math, we bundle our straws every time we get to a group of ten. We do the same thing with tens. So when we get to 10 tens, we bundle them together and they become 100! Stand up and Sky Write 100 with me.**

100 is a 3-digit number, so we have to write 3 digits to write 100.

STUDENTS DO: Stand and sky write 100 with the teacher.

TEACHER SAY: **Now, let's practice writing it in our journals. Write 100 three times in your journals. When you are finished, show your Shoulder Partner your work. Circle your Shoulder Partner's best 100.**

STUDENTS DO: Write 100 in their journals three times. Check their shoulder partner's work and circle their best 100.

TEACHER SAY: **We're going to celebrate getting to 100 by playing some games and doing some fun activities together.**

Note for the Teacher: Read the counting games and activities below and decide which ones you would like your students to do today. It is not necessary to complete all games and activities.

Bingo
Create or print out **number charts** from 1-100 as shown below. You will need one chart for each pair of students. Gather enough **counting objects** for each pair of students to have 75-80.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Call out random numbers from the number chart. Students will find the number and place a counter on it. Repeat until the class has covered a row or column of numbers. Play a few times together.

Catch and Count
This game is played the same as **Counting Classmates**, but instead of pointing, the students gently toss a **ball** to their classmates. The colleague who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Counting Classmates
The teacher will point to self and say, "One." The teacher will then point to a student. That student must stand and say, "Two." That student points at a colleague. That student stands and says, "Three." The game continues until the class reaches 100. Once all students are standing, students will sit and count when their colleague points to them. Option: Count by 10's to 100 until all students are standing.

Counting Cups
In Counting Cups, students play in small groups. Prepare for the activity by gathering **10 paper or Styrofoam cups** for each small group. Write 10 on each cup. Gather **counting objects** so each group has 100. Place them in **bags or cups** to make it easy to hand them out. Prepare the **recording sheets** (or have students create them) shown below.
Each student needs a recording sheet. To play, students will dump out 1-10 cups of counters, count the objects, and record the total on the recording sheet across from the number of cups they dumped out. Students will continue to dump out cups and record the totals until the recording sheet is filled. Each time they finish dumping out counters and counting, they should return 10 counters to each cup.

Cups	Counters
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Jump Up Game
Students squat down and clap from 1 to 100. Each time they get to a ten (10, 20, 30, 40, 50, 60, etc.), they jump up and shout that number.

Missing Number Detectives
Create several **activity sheets** that show numbers in a sequence with some of the numbers missing (examples shown below). Students work independently or in pairs to fill in the missing numbers.

1	2		4	
6			9	10

23	24	25		
28		30		32

	13	14		16
		19		21

31		33		35
	37		39	

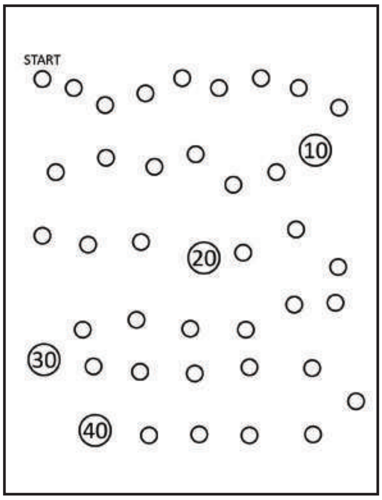
52	53			56
57				61

76		78		80
	82		84	

Alternatively, this activity can be completed on one recording sheet showing 1-100 (example shown below).

1	2			5	6		8		10
	12	13		15			18	19	
21			24		26	27		29	30
		33	34			37			
	42			45	46		48		50
51			54			57	58		
		63	64	65				69	
	72				76	77			80
81				85			88		
		93	94			97		99	

Race to 100
This game can be played by 2-4 players. To prepare, create or print out **game boards** as shown below (example shown to 40). Write numbers 1-100 in circles on the game board. Write tens numbers in larger circles. Create **5-10 tortoise and 5-10 hare cards** for each group (examples shown below). Each group will need **4 different counters**.







Tortoise and hare cards are shuffled and placed face down. All students start at 1 and take turns turning over a card. If a tortoise card is turned over, the student moves 1 space. If a hare card is turned over, the student moves 10 spaces. When all cards are used, a student should shuffle them and turn them face down again. The first player to reach 100 wins!

Tower of Tens
In this activity, students create a tower of cups to help them count from 0-100. Each student need **11 Styrofoam cups** and **pens or markers** (different colors, if possible). Guide students through the activity: Students should take the 1st cup, turn it upside down, and write 0 on the lip. Turn the 2nd cup upside down and write 10 on the lip. 3rd cup: 20. 4th cup: 30. 5th cup: 40. 6th cup: 50. Continue to 11th cup: 100. On each cup, students should write the numbers 1-9 from the lip of the cup to the bottom of the cup. When finished, students can use their cups to practice counting from 0 to 100.

Note for the Teacher: If students played this game at the 40 celebration, they can continue to build the towers they started.

Share (5 mins)

Directions

1. **TEACHER SAY: What was your favorite game or activity today? Why is it your favorite? Are there any other counting games or activities you would like to do?**

STUDENTS DO: Raise hands to respond.

TEACHER DO: Call on students with raised hands to talk about their favorite games and activities and their ideas for games/activities for the future.

Egyptian Knowledge Bank
بنك المعرفة المصري

مركز تطوير المناهج والمواد التعليمية
CCIMD
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2030
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